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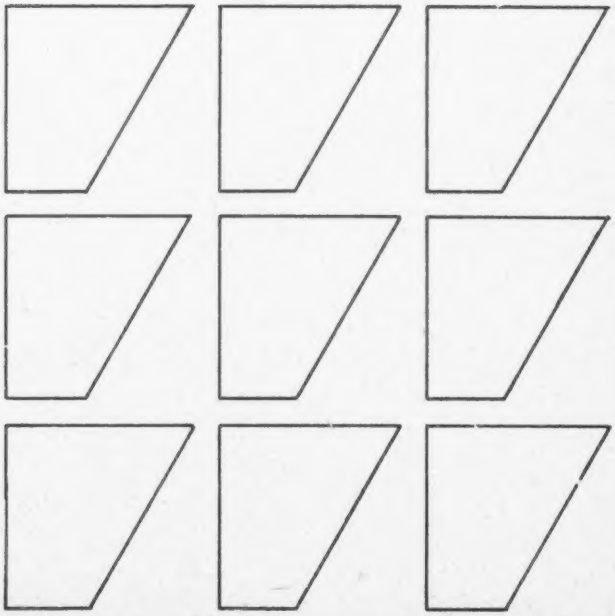
THE REGULATION OF FOREIGN BANKS: Policy Formation In Countries Outside The United States

By Adrian E. Tschoegl



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Biographical Note

Adrian E. Tschoegl is Assistant Professor of International Business at the Graduate School of Business Administration at The University of Michigan. His current research interests involve the growth, expansion, and regulation of multinational banks.

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Policy Formation In Countries Outside The United States

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Summary

This paper's subject is the political economy of the regulation of foreign banks in countries other than the United States. We investigate the following two questions:

1) What are the major types of regulations?
2) What are the political and economic forces that cause the observed treatment of foreign banks in each country?

The intent is to investigate the nature and determinants of the regulations facing foreign banks. Our emphasis is on the regulations, and not on the characteristics of the various countries.

Our methodology is extremely simple. First, we categorize and incorporate into an ordinal scale the regulatory schemes of various countries vis-a-vis foreign-owned banks. Next, we relate the resulting variable to various country-specific characteristics which we hypothesize to have a bearing on the decision of which policy a country will adopt. The ten factors examined are: the government's desire for control, opposition to dependence on foreigners, the domestic banking industry, concern for depositor safety, relations with other governments, the role of foreign banks as sources of funds, trade promotion, reciprocity, the enhancement of domestic financial markets, and the desire to create a financial center.

One impression that emerges from the study is that the key consideration in determining a country's position on foreign bank entry and operations is what it perceives to be the costs of such activities, rather than the benefits. Benefits seem to have only a slight effect, since it is possible to gain many of these while still being highly restrictive.

Some countries, primarily those with socialized banking systems, object to foreign banks because they are, or would act like, private institutions. A number of countries with essentially private banking systems oppose foreign banks simply because they are foreign. They fear that their banking systems will become dominated by foreign institutions.

In the case where the government is concerned with retaining control, the underlying cause is political—the country's view of the proper role of the state. In the case of dependence, the causes

appear to derive from historical patterns of investment, as well as the political and economic relations between states.

In addition to these basic sources of attitudes towards foreign banks, the nature of the domestic industry seems to have an effect. The regulatory authorities are responsible for the stability of the banking system and depositor safety. They may restrict foreign bank operations or entry in support of these aims. They may also fear that foreign bank will not respond to government policies as do local banks, and may undermine patterns of cross-subsidization. Finally, regulators may be captured by the institutions they regulate. However, it is hard to separate these cases from those where regulators are protecting a cartel of inefficient producers because of public policy concerns.

The results of this essay suggest the following very simplified model of the regulation of foreign banks, which we would consider as a working hypothesis for further research. We can think of each country as asking itself three questions, in order:

Q1. Will we permit domestic private ownership in the domestic banking sector?
Q2. Will we permit foreign ownership in the domestic banking sector?
Q3. Given our answer to one and two above, do the remaining benefits outweigh the remaining costs, or vice-versa?

If the country's answer to either of the first two questions is "No," then one can expect that it will be at best restrictive towards foreign banks, and probably closed. If its answer to both of the first two is "Yes," then it will probably be open. In either case, the degree of restrictiveness, i.e., distance from the extreme position, will depend on the country's assessment of its answer to the third question, the residual cost/benefit considerations. That is, countries have political-economic attitudes that incline them towards one polar position or the other, i.e., towards being closed or open. Consideration of benefits from entry may move some countries that are oriented towards the closed end of the spectrum, towards the middle. Similarly, the costs of openness either to the industry or to the country will push some countries which tend to be open towards greater restrictiveness.

The model suggests that one can decompose what is commonly termed "political risk" into three components, each of which refers to changes in a country's response to the three questions above. While we do not specifically examine the process of change in regulations, the cases and the model suggest that each of these types of risk will manifest itself differently.

1. Introduction

This paper's subject is the political economy of the regulation of foreign banks in countries other than the United States. We investigate the following two questions:

1) What are the major types of regulations?
2) What are the political and economic forces that cause the observed treatment of foreign banks in each country?

The intent is to investigate the nature and determinants of the regulations facing foreign banks. Our emphasis is on the regulations, and not on the characteristics of the various countries. The inquiry is important for several reasons. First, the essay's concerns are topical, though not new [see, Wallenberg, c. 1920]. Second, if, as seems likely, the reduction of barriers to direct investment in service industries becomes the object of international negotiation, the success of the negotiators will depend in part on their understanding of why countries pursue the policies they do. Third, a comprehensive theory of regulation must be grounded in the analysis of the situation throughout the world, and not just that in liberal, developed countries.

The U.S. Treasury Department has recently released a study by the Comptroller of the Currency (hereafter referred to as the Comptroller's report or study) of the regulation of foreign banks in countries other than the U.S.[1] The study finds that U.S. banks have a "substantial degree of access to most financial markets abroad of importance to them, both in terms of initial entry and the powers they may exercise once entry has been accomplished." It concludes that American banks "generally receive equitable treatment abroad," though few countries would allow U.S. banks to acquire control of large indigenous banks. We use the report as the basic source of data on the regulations and, to a lesser degree, for more general information on specific countries.

Our methodology is extremely simple. First, we categorize and incorporate into an ordinal scale the regulatory schemes of various countries vis-à-vis foreign-owned banks. Next, we relate the resulting variable to various country-specific characteristics which we hypothesize to have a bearing on the decision of which policy a country will adopt. We draw the ten factors examined from theories of bargaining between MNCs and governments, and theories of regulation. Our intent is not to test the theories either individually or against each other, but rather to use them as sources of insight or perspective.

---

[1] U.S. Treasury, *Report to Congress on Foreign Government Treatment of U.S. Commercial Banking Organizations*, Sept. 1979.

The techniques used to provide evidence for the existence and operation of the factor include comparisons of means without significance testing, cross-tabulations, and discussions of cases. Finally, we develop a qualitative static model of a country's choice of regulatory scheme and suggest some dynamic hypotheses.

We have chosen to eschew the usual practice of first presenting the model and then marshalling the relevant evidence. Doing so would imply that the research method was far more deductive than was actually the case. The true process was quite inductive.

The second section reviews some of the relevant literature on banking, relations between the host country and the multinational company, and regulation. The third section develops a typology of ownership and operating restrictions, and a combination of these. The fourth section discusses the determinants of the regulations. The final section suggests origins for some of the determinants, and attempts to integrate certain of the considerations.

2. Definitions and Theoretical Background

It is very hard to define banking, or even commercial banking. In essence, for this paper we simply accept each country's definition, even when these are inconsistent with each other. That is, we accept as commercial banking whatever the country implicitly or explicitly accepts as such. To the degree that a common definition emerges, it is that a commercial bank makes commercial loans, generally short term ones, and issues demand deposits.

Similarly, there is no consistent, generally accepted definition of regulation. We will take the term to mean government control of entry, or activities, in this case, as applied to foreign banks.

There is virtually no comparative literature on the national regulation of multinational companies (MNCs). Concern has focused either on the international regulation of MNCs. (i.e., Codes of Conduct) or on regulation within a single nation (e.g., Calvet [1977] and Lombard [1977]). Robinson's work on entry control systems [1976] and investment incentives [1979], Sachdev's article [1978] on investment policies, and Safarian's examination [1978] of the policies of developed countries towards multinationals are exceptions.

As far as banking is concerned, the situation is similar. There are few books that deal with the banking systems of several nations. Lees and Eng's study [1974] is descriptive without being comparative or analytical, and barely mentions the role of foreign banks. Baker [1978] describes bank regulation in a number of major countries and includes a chapter on deposit insurance schemes in countries other than the U.S. Though his primary interest is in banks' international activities, he does report on the activities and restrictions on foreign banks in the countries he examines (primarily Europe, the Middle East, and Japan). The *Financial Times*' Economics Advisory Group [1976] has made a study of banking and monetary policy in the European Economic Community (EEC), but analysis is limited to the latter concern. A recent article by Philip [1978] contrasts Anglo-Saxon financial and banking systems with the continental pattern, but unfortunately he discusses only West Germany, France, and Italy in any detail.

Weston [1980] surveys the regulatory practices with respect to monetary control of an eclectic group of nineteen countries. He does not find any "consistent pattern . . . along which domestic banking regulation may be seen to be moving" (Weston [1980, p. 240]). This is not surprising given his sample and his lack of systematic comparison and analysis.

There are some works on the political economy of international banking (e.g., Aronson [1978]), and a very few national case studies: Kelly [1977] of the U.K., Fayerweather [1974] of Canada, Baum [1974] of the Caribbean, and Boyce and Lombard [1976] and Lombard [1977] of Colombia. However, the bulk of the literature on the regulation of foreign banks remains journalistic.

One can generally expect that a country will regulate foreign banks at least as strictly as domestic banks. Similarly, if a country is generally restrictive towards foreign direct investment, it will probably be at least as restrictive in the banking sector as in any other. Banking is considered a key sector in most countries and Kobrin [1978] has found it to be particularly prone to expropriation. Nevertheless, these considerations at best provide only bounds. They do not come to grips with the question of why the constraints on foreign banks relative to domestic banks are tighter in some countries than in others.

We can derive the reasons for differential regulation from two sources. The first is the literature on bargaining with multinational companies (MNCs) and government-MNC relations. The second is the theory of regulation.

The very idea of bargaining with MNCs implies that permitting them entry brings benefits to the host country, but also imposes costs on it. As Streeten [1976] and Morley [1975] discussed the concept, the benefits are technology, jobs, access to markets, etc., and the costs are the excess or monopoly profits that the MNCs earn.

In the case of banking, we would argue that excess profits are probably slight except where host-government policies have created market distortions from which foreign banks may benefit. The international banking industry is far from concentrated, and each potential investor country is represented by a number of banks [Tschoegl, 1981]. Nevertheless, as we discuss below, circumstances may lead to foreigners gaining monopoly profits in the short run. One can then expect authorities to act to curtail these quasi-rents.

The benefits from foreign entry include trade promotion, access to capital, access for domestic banks to other countries, enhancement of domestic financial markets, and creation of an international financial center. The idea of countries negotiating with foreign firms also introduces the question of relative bargaining strengths and the role of foreign governments.

The literature on host-country—MNC relations is dominated by the question of sovereignty, i.e., the locus of control (e.g., Vernon [1971]). Banking is generally considered a key sector, and a foreign presence may be considered problematic for both macroeconomic and firm-level reasons. One may expect a government to be concerned about the effect of the presence of foreign banks on monetary policy, exchange rates, capital inflows and outflows, and investment patterns. At the firm-level, bankers are often credited with the power of life and death over companies because of their ability to grant or withhold credit. This is especially so in countries without well-developed capital markets and with concentrated banking sectors. Countries may be loath to permit foreigners to exercise this discretion.

The traditional theory of regulation emphasizes the public purposes of regulation, in this case the creation of a banking system and the provision of a safe (default-free) asset for households. Thus the desire to assure the stability of the banking system and depositor safety could be a factor in determining host countries' attitudes towards foreign banks.

Chronologically, the traditional view was followed by another which emphasized the "capture" of the regulators by the regulated. Under this theory, regulation is perverted to protect a cartel, or at least inefficient producers, with no quid pro quo for consumers. More recently, Lee [1981] has proposed a theory of regulation that treats it as an exchange process in which an industry gives up the power of price determination in return for protection from entry. Either approach leads us to consider the possibility that restrictiveness towards foreign banks may be motivated by the domestic industry, or elements of it, pressing for protection from entry.

Finally, Posner [1971] stresses the taxation and subsidization functions of regulation. Peltzman [1976] further emphasizes the use of regulation for wealth redistribution and as the outcome of a political process. These suggest that foreign banks may be barred if their entry would threaten the viability of a system of cross-subsidization or income redistribution erected by regulatory authorities.

In Section 4, we discuss the determinants of regulation which these theories suggest. However, we must first develop some classificatory scheme that will permit the grouping of countries in terms of their policies.

3. Types of Restrictions

While it is relatively simple to discover the nominal laws and regulations in each country, determining the real situation is a more complex problem. Actual legislation forbidding a particular practice may be lacking, yet each foreign bank entering a country may have to promise the local central bank or other regulatory authority that it will subscribe to a perhaps unpublicized "gentlemen's agreement" which is fully as restrictive. Even more amorphously, all the foreign banks in a country may know that while some particular activity is not forbidden to them by law or regulation, the requisite prohibition would appear or they would be subjected to sanctions if they were to attempt to engage in it. These restrictions may be important, but are nearly impossible to identify in any systematic way. Conversely, regulations or laws may be promulgated but not fully enforced. This may be the consequence of post-legislation redefinition by the relevant government agencies, the impracticality of the regulations (i.e., difficulty of enforcement in principle), or the administrative weakness of the regulatory authorities [Naim, 1978]. Finally, laws or regulations may be applied equally to foreign and domestic banks, but have a differential impact on the two groups.

The typology of the regulation of foreign banks used in this paper is based primarily on the data in the Comptroller's report. The authors of the report have attempted to overcome the problem of identifying the actual situation by surveying U.S. banks with international operations and U.S. embassy personnel for their assessments.

In the abstract, it is simple to specify the polar categories of the classification. One extreme is a policy of complete prohibition on entry. The other is one of national treatment (complete nondiscrimination between domestic and foreign-owned banks).

Both extremes occur. Many countries prohibit any foreign bank presence, and others permit only representative offices. Absolutely national treatment, however, is particularly rare. On the one hand, even very open countries may retain some limitations. Safarian [1978] noted that the governments of the nine developed countries he examined had a position that could be described as protection of key firms against foreign takeover. As the Comptroller's study indicates, this policy extends to the foreigners' right to acquire major domestic banks. On the other hand, legal lacunae or even government policy may lead to advantages for foreigners. It is therefore more useful to think in terms of approximate, rather than absolute, national treatment.

Between these extremes, classification becomes more difficult. Foreign banks may in effect be permitted to engage in almost all the same activities as do domestic banks, as long as they do not engage in some key activities (such as accepting demand deposits) and do not call themselves banks. Restrictions may also differ for different organizational forms (branch or subsidiary) or depending on the extent of foreign ownership. They may depend on the nationality of the foreign bank, whether it is government or privately owned, or the size of its operations. Finally, when foreign-owned banks or their branches are constrained in some respects relative to domestic banks, the regulatory authorities may release them from other requirements.

In certain cases where the authors of the Comptroller's report felt that the regulatory situation in a country with respect to the form of entry permitted was unclear or ambiguous, we have imposed our own subjective assesment. Where regulations discriminate among foreign banks (e.g., by country of origin), we have based classification on the treatment which would appear to be accorded the majority of the world's largest banks.

In the next two subsections we discuss ownership and operating restrictions separately. The third subsection combines these two dimensions.

3.1 Ownership

Classification is based on two questions, asked in sequence:

1) May foreign-owned banks open a branch?
2) May foreign-owned banks own a majority share in a local subsidiary, are they restricted to minority positions, or are any holdings in local subsidiaries barred?

These two questions together provide a six-fold categorization, with the categories arranged in order of restrictiveness. Since branching is usually the preferred form of entry, we consider a country that permits foreign banks to open branches but forbids any ownership of a local subsidiary as less restrictive than one that forbids the former but permits even wholly owned subsidiaries.[2] Countries that currently ban any entry, by either foreign or new domestic banks, are classified by their previous policy since the policy is nondiscriminatory with respect to origin. We do not factor in whether or not representative offices are permitted. Since, for most of the discussion below, we will be collapsing the existing categories even further, the need for extra precision is questionable.

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[2] *Ibid.*, Chapter 5.

As far as the second question above is concerned, we attempt to focus on the organizational form permitted or required for entry, and not on whether different rules apply to de novo entry than to acquisitions of major indigenously owned institutions. We take as given that almost no countries would permit the latter. This approach, however, involves us in further interpretation of the data, since the Comptroller's report does not always distinguish between the two possibilities. As a final qualification, the classification refers only to the restrictions governing domestic banking markets as defined by the country. We do not take into account regulations governing offshore banking units which countries may authorize and which are service analogs of manufacturing operations in export trade zones [McCarthy, 1979]. We also do not adjust the classification for those cases where foreign banks may establish financial subsidiaries provided that these do not call themselves banks and do not engage in certain retail banking activities.

Table 1 presents the classification, the number of countries falling into each category, and a weighted classification. This last consists of the proportion of the total gross national product (GNP) of the countries in the sample represented by the countries falling into each category. Clearly, there is a certain clustering towards the extremes.

The figures for the most restrictive category understate its true relative importance. A small number of countries such as Albania, Vietnam, and North Korea, among others, were omitted. These all happen to be highly restrictive towards foreign bank entry. Inclusion of the United States would probably not change the picture. Most states are quite restrictive, though some of the wealthiest are not. The states would thus be distributed over the spectrum of categories.

3.2 Operating

Operating restrictions provide countries with ways to tailor their regulation of foreign banks beyond the fairly crude limits given by ownership provisions. Operating restrictions take many forms. Table 2 lists some of the ones most frequently encountered.

Table 3 presents the classification of the countries into three categories on the basis of a subjective assessment of the severity of the restrictions. In the first category are those countries that have no, or seemingly only minor, restrictions. The middle group consists of the countries that permit foreign banks to operate but impose restrictions that would seem to be significant. The third group consists of those countries that ban foreign-owned banks outright, forbid them any but the most minor roles, or restrict them essentially to activities associated with international trade.

Operating restrictions appear a less popular regulatory mechanism (in terms of the number of countries adopting them) than

TABLE 1

Ownership Restrictions
(1979)

Branch	Subsidiary	No. of Countries (A)	Proportion (GNP-Weighted) (B)	No. of Countries (C)	Proportion (GNP-Weighted (D)	Classification (E)
Yes	Maj.	6 52	32%	4 52	32%	OPEN
	Min.	5 13	14%	3 17	15%	RELATIVELY OPEN
	No	4 4	2%			
No	Maj.	3 7	1%	2 28	10%	RELATIVELY CLOSED
	Min.	2 21	9%			
	No	1 41	43%	1 41	43%	CLOSED

Notes: 1) Numbers in upper right-hand corners in columns A and C are orderings.
2) Proportions are based on the number of countries falling in the category multiplied by their GNPs in U.S.$ billions in 1978 (or nearest year).

Source Comptroller's Report, 1979

ownership restrictions. This is probably a function of administrative convenience. Ownership restrictions require little or no surveillance of banks by regulatory authorities. When restrictions are imposed, limitations on deposit-taking and branching are among the most frequently used.

TABLE 2

Operating Restrictions

Restrictions On:	No. of Countries
Number of Branches	19
Access to Government Deposits or Business	19
Ability to Staff with Home-Country Nationals	11
Access to Retail Deposits	10
Liquidity, Capitalization, Leverage	8
Access to Central Bank Rediscount	5
Access to Government Export Financing Schemes	5
Access to Non-International Trade-Related Activities	4
Differential Tax Burden	3
Profit Remittances	2
Miscellaneous	8

TABLE 3

Operating Restrictions

# of Countries	Proportion (GNP-Weighted)	Classification
76	36%	Essentially Non-Discriminatory
31	29%	Restrictive
31	35%	Prohibitory

3.3 Synthesis

In this subsection we combine the results from the previous two to arrive at an overall classificatory scheme. We treat ownership and operating restrictions as two dimensions of regulatory policies. Figure 1 shows the resulting cross-classification. The divisions are subjective, but there is a rough ordinality to the categories. Thus we map the two dimensions back onto one, while limiting the number of categories.

The simple correlation between a country's numerical rating on the two dimensions of ownership and operating restrictions is 0.582. Cramer's V for Table 4 is 0.407.[3] A country's policies on the two dimensions generally appear highly consistent. Nevertheless, there are some cases of no relationship.

One such situation occurs when a country bars further foreign entry in any form, but permits existing foreign-owned banks the same scope of operation as domestic banks.[4] Mozambique represents an opposite case. There, entry per se is free, but the laws governing commercial banking are so restrictive as to have driven all but one nongovernment bank out of operation.

Table 5 parallels Tables 1 and 3. The bimodality we observed in Table 1 persists, at least from a GNP weighting point of

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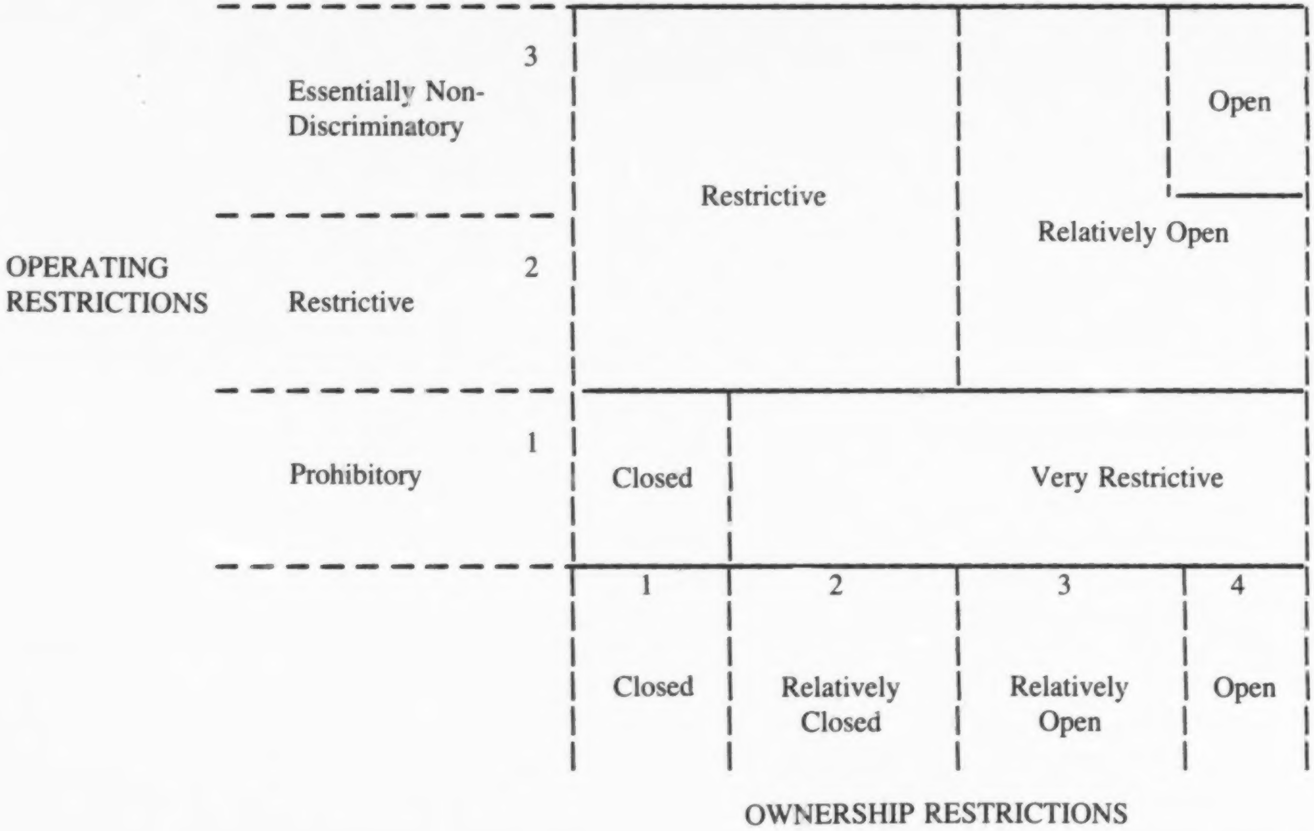
[3] Cramer's V is a measure of association for cross-tabulations. It is the square-root of the ratio of the chi-square statistic to the total number of cases, adjusted for degrees of freedom. By convention it is always positive.

[4] In some of the countries concerned, almost the entire banking system is foreign-owned, generally as a heritage of colonialism.

FIGURE 1

Typology of Regulatory Regimes


OPERATING RESTRICTIONS
3
Essentially Non-Discriminatory
2
Restrictive
1
Prohibitory
Restrictive
Open
Relatively Open
Closed
Very Restrictive
1
Closed
2
Relatively Closed
3
Relatively Open
4
Open
OWNERSHIP RESTRICTIONS

view. From the third column it is apparent that many small (in terms of GNP) countries must fall into the first and third categories, and some particularly large ones (i.e., the U.S.S.R.; and the P.R.C.) in the fifth. The Appendix lists all the countries in the study and their rating on the combined measure. In the tests below, because of the small number of cases in the second and fourth categories, we frequently combine categories.

TABLE 4

Cross-Classification by Ownership and Operating Restrictions

OPERATING RESTRICTIONS	3	7	16	7	46	76
	2	10	11	5	5	31
	1	24	1	5	1	31
	TOTAL	41	28	17	52	138
		1	2	3	4	TOTAL
		OWNERSHIP RESTRICTIONS				

$$\chi^2 = 44.208\ (p \leq .001)$$

Cramer's V = 0.407

TABLE 5

Degree of Openness/Restrictiveness

Category	Number of Countries (a)	Proportion (GNP Weighted) (b)	Ratio (b)/(a)
5) Open	46	29%	0.63
4) Relatively Open	17	16%	0.94
3) Restrictive	44	19%	0.43
2) Very Restrictive	7	2%	1.16
1) Closed	24	34%	

4. Determinants of Regulation

The determinants are grouped under ten conceptual headings: control, dependence, the domestic banking industry, depositor safety, relations with other governments, source of funds, trade promotion, reciprocity, enhancement of domestic financial markets, and creation of a financial center.

4.1 Control

The literature on foreign direct investment is replete with references to the problems that the presence of foreign firms may cause governments which seek to impose some policy. The foreign firms can be expected to react to government policies in a different manner than would local firms, and may have better means for evading restrictions since they span borders and can transfer resources internally [Lessard, 1979]. Their responses may thus weaken, or even negate, the effect of policies; in fact, the policies may even give foreign firms an advantage over wholly domestic firms [Fung, 1978, and Hawkins & Macaluso, 1978].

In the non-Communist countries, governments pursue two different types of policies when they wish to introduce their priorities into the banks' decisions. They either socialize the banking system in whole or in part, or leave it in private hands but promulgate rules which constrain the banks' freedom of action. Regulations often specify the interest rates which depositors can receive or borrowers must pay. The government may require the banks to allocate credit directly. Such credit allocation is a frequent concomitant of interest-rate policies, though it may occur independently of them. We do not have sufficient information on the existence of credit allocation and interest rate ceiling policies to relate these to the degree of restrictiveness vis-à-vis foreign banks. Instead, we must make do with proxy variables. We use two: one based on the degree of government ownership of the banking sector, and one reflecting the severity of foreign exchange controls.

We would hypothesize that countries which feel that the banking system is so important to the conduct of the economy that it must be government-owned (i.e., socialized) would be highly restric-

TABLE 6

Government Ownership of the Banking System and Degree of Openness/Restrictiveness

		Socialized banking System	Government Owns Major Commercial Bank	Essentially Private
Degree of Openness/ Restrictiveness	4 + 5	4	19	40
	3	3	24	17
	1 + 2	26	3	2

$$\chi^2 = 87.510 \ (p \leq 0.000)$$
$$\text{Cramer's } V = 0.563$$

tive towards foreign banks.[5] Such countries might permit a limited foreign presence because of some of the other considerations discussed below, but would be careful to restrict the foreigners to just those key activities which justify their presence. The government's opposition in these cases is probably based more on the fact that the banks are private than that they are foreign.

Labelling the remaining countries as "not socialized" is too crude since this lumps together countries such as India, where the commercial banking system is some 95 percent government-owned, and others such as the U.K., where all commercial banks are publicly owned. We have therefore further differentiated the countries in this category into two: those in which the government owns a major commercial bank and those in which it does not.[6] In Table 6 we cross-tabulate the resulting variable with our regulatory scale. There is a very strong association between the existence of a socialized banking system and the imposition of restrictions on foreign banks; however, this is essentially due to the fact that this category differentiates those countries that are closed or very restrictive from all the others (Table 6-I). Even so, if we examine the four cells in the lower right-hand corner, it is clear that countries where the government owns a major commercial bank are more likely to be restrictive than those in which it does not (Table 6-II). The measure of association used to summarize the tables is the logarithm of the odds ratio, which we will call the "log-odds."[7]

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[5] Countries' banking systems are designated as socialized if the national government has total or majority ownership of all the commercial banks in the country, wholly or partially foreign-owned banks aside. We reserve the term "nationalized" for banking systems in which the government permits private ownership of banks, but requires that the majority of the shares be owned by local nationals. We use the terms "publicly-owned" and "private" interchangeably to designate banks that are not government-owned. Government ownership is described as such.

TABLE 6-I

Socialized Banking System
and Degree of Openness/Restrictiveness

	Socialized Banking System	Not-Socialized Banking System
1 + 2	26	5
3 to 5	7	100

$a = 4.308\ (p \leq 0.000)$

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[6] The basic criterion used was whether the government owned the majority of the shares of at least one of the three to four largest banks in the country, based primarily on the information in the *Banker's Directory* [Rand McNally Internaional, 1978] and the *Government Finance Statistics Yearbook* [International Monetary Fund, 1979]. Where balance sheet data were unavailable, generally in countries with few banks, the criterion reduced to the question, "Does the government own any commercial banks."?

[7] Log odds is the term for the logarithm of the odds ratio. For two-by-two tables, $a = \log n11 + \log n22 - \log n12 - \log n21$ where the n's are cell frequencies. It can range between positive and negative infinity, indicating positive and negative association, respectively. A value of zero indicates independence. The variance of the log odds is given by the formula:

$$v(a) = 1/n11 + 1/n12 + 1/n21 + 1/n22$$

Since the log odds has a Gaussian distribution around its mean, one can test hypotheses such as that the observed log-odds is not significantly different form zero.

TABLE 6-II

Government Ownership and Degree of Openness/Restrictiveness

	Government Owns Major Commercial Bank	Essentially Private
3	24	17
4 + 5	19	40

a = 1.089 ($p \leq 0.005$)

Government ownership of commercial banks is an imperfect proxy for the desire to control since these two policies may be quite independent. On the one hand, the ownership may simply have resulted from takeover of a failed bank, or from the growth and diversification of a rural or postal savings bank system. Such banks might function in a manner indistinguishable from that of private banks, and the whole system might be marked by relatively little government direction. Austria is possibly a case in point. On the other hand, all banks might be privately owned but subject to extensive direction. Japan is an illustrative case. Given the importance, of control as a factor and the ambiguity of government ownership of the banking system as a proxy, we use a second measure, the stringency of foreign exchange controls, as a check.

Governments which are oriented towards the control of the domestic economy probably are also active in the control of foreign exchange dealings. We use as our measure of stringency the rating scheme in Pick (1981). Pick distinguishes four levels of control: free, liberal, strict, and dictatorial.[8] Table 7 presents the cross classification with our measure of openness/restrictiveness.

There is an association which we could strengthen if we were to collapse the free and liberal categories. What is most noticeable is that no country with dictatorial controls permits any but the most limited foreign bank presence. This result is similar to that for socialization of the banking system. What weakens the further association between the two variables is that countries impose exchange

TABLE 7

Stringency of Foreign Exchange Controls
and Degree of Openness/Restrictiveness

		Stringency of FX Controls			
		Dictatorial	Strict	Liberal	Free
Degree of Openness/ Restrictiveness	4 + 5	0	17	33	11
	3	0	17	18	9
	1 + 2	14	11	5	1

$$\chi^2 = 60.622 \ (p \leq 0.005)$$
$$\text{Cramer's } V = 0.472$$

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[8] The classification for the majority of the countries is from Pick [1981]. For those not covered, the classification is the author's of this paper, based on Pick's definitions below.
FREE CURRENCIES are units whose financial transfer to other countries is generally not bound to licenses or official permission. They are not the object of black market transactions.
UNITS UNDER LIBERAL CONTROL are currencies whose free or black market value differs, often substantially, from Official Rates. But in countries of such liberal control, ownership of foreign banknotes, bank balances abroad or gold is either legal or tolerated, and infractions of currency legislation are not punishable by jail sentences.
UNITS UNDER STRICT CONTROL are, in general, the objects of active black market transactions, have multiple official values, are surrounded by voluminous protective legislation and cannot be transferred abroad without special permits or authorization. Ownership of foreign monies or bank balances in other countries is always illegal and punishable by confiscation, heavy fines or prison sentences. Financial censorship prevents publication of black market values of strong currencies in local newspapers.
UNITS UNDER DICTATORIAL CONTROL are currencies whose Official Rates are unrealistically high and are enforced by severe legislation. Statistics concerning currency in circulation are generally a "State secret." These units are, without exception, the objects of black market transactions, which often list foreign strong currencies at extremely high premiums. Ownership of other than national units is punishable by long prison sentences or deportation to labor camps. In Russia, even death is decreed for "crimes against the national currency."

controls not only to prevent outsiders having any command over the domestic economy, but probably more frequently to stem a Balance of Payments deficit. This too might lead to some controls on foreign direct investment because of foreign firms' abilities to arbitrage controls through internal transfers. However, the magnitude of the effect is probably slight and the blocking of capital outflows motive for controls obscures the relation between the desire for control of the domestic economy as evidenced in the foreign exchange and the banking sectors.

4.2 Dependence

West [1973] distinguishes three perceptions of dependence: 1) the dominating presence of foreigners; 2) commodity composition, concentration, and technical level of developing countries' output and foreign trade compared with those of the developed countries; and 3) participation in the international capitalist system.

A concern with *dependence of the first kind* differs from a concern with control. In the latter case, it is the freedom of action of decision makers external to itself that a government wishes to circumscribe. In the former, it is the role of decision makers external to the nation that is the cause of concern.

We have no measure for dependence. It is difficult to develop an indicator because contrafactual perceptions are often involved: that is, it is believed in the country that if it were not for the restrictions, foreigners would dominate.

That it is difficult to quantify the concept does not mean that it is not important. The very fact that many countries are averse to the acquisition of major domestic banks by foreigners, while perhaps even encouraging the takeover of smaller, troubled banks, bespeaks a certain reservation.[9] We will illustrate the operation of the factor with reference to two regions (Scandinavia and Latin America) and several countries (Canada, and Morocco, Nigeria, and Saudi Arabia).

Until recently, all the Scandinavian countries (Sweden, Norway, Denmark, Finland, and Iceland) were distinctly more restrictive towards foreign-owned banks than were other European countries. Denmark is now more open, as a result of its implementation of a 1973 EEC directive.

If, for the moment, we use the six-way division of ownership restrictions as an interval scale, the average category for the five Scandinavian countries (including pre-1975 Denmark) is 1.4 and the mode is 1 (i.e., no foreign presence except perhaps in the form of representative offices). For the other eight EEC countries plus Switzerland and Austria, the average is 5.5 and the mode is 6 (i.e., no restrictions). The Scandinavian prohibition is long-standing and is probably due to a number of factors.[10] While none of the banking systems are socialized, the government owns a major commercial bank in four of the five countries. In Norway, parliament appoints the majority of the members of the governing body of each private bank. In addition, we suspect—without proof—that one cause of the Scandinavian countries' restrictiveness was a fear of domination by Germany and, for some, by Sweden. In our opinion, and again without proof, other European countries have solved the problem of what to do about Germany or each other by bank-level "nonaggression" pacts. There is still very little cross-FDI in banking among the countries, and far less than one would expect given the existing physical and cultural proximity.[11]

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[9] For example, *World Business Weekly* [Dec. 22, 1980; pp. 51-52] reports that Credit Lyonnais' acquisition of the sixth largest Dutch bank represented something of an unprecedented intrusion. What made it acceptable was that the institution in question, Slavenburg's Bank, was experiencing difficulties. Acquisition by another of the major Dutch banks would have aggravated already high concentration in the industry.

A second region in which concern for dependence may play a part is Latin America, especially Mexico and the Andean Pact countries. Here the primary concern is with domination by U.S. banks. We discuss the case of the Andean Pact in Section 4.5 below. The Mexican prohibition on foreign entry stems from the international banking crisis of the 1930s. The policy has been continued because of a fear that U.S. banks would overwhelm the smaller and less sophisticated Mexican banks and that the Mexican financial system would become simply a satellite of the U.S. financial system. The first of these concerns may be fading as the Mexican banking system becomes less fragmented and Mexican banks begin to operate abroad.[12]

The next case we discuss is that of Canada. Here too, U.S. foreign direct investment has been a major political issue for some time [Calvet, 1977]. The role of concern with dependence in the banking sector was most clearly revealed in the Mercantile Bank affair [Fayerweather, 1974 and Vorstermans, 1978].

First National City Bank (a U.S. bank now known as Citibank) acquired the Mercantile Bank from its Dutch owners in 1963. Mercantile was the smallest of the then eight chartered banks, and the only one foreign-owned. At the time foreign banks were not permitted to open branches or agencies, and establishment of a bank subsidiary required chartering by an act of Parliament. It was clear that Parliament would not charter any foreign-owned bank, and many Canadians regarded Citibank's action as the exploitation of a loop-hole in the banking law. The acquisition gave rise to great debate and resulted in the inclusion in the 1967 Bank Act of a provision prohibiting any foreign ownership of Canadian banks in excess of 25 percent, with any one foreign shareholder being restricted to 10 percent. It is clear that much of the opposition was on nationalistic grounds and involved the fear that other foreign, and particularly U.S., banks would acquire Canadian banks. The Canadian Bank Association took no position on the issue, and the major Canadian banks individually did not oppose the acquisition.

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[10] Wallenberg (c. 1920) reports that Sweden, Norway, and Finland forbade foreign banks to establish branches or subsidiaries. Denmark did not, but required reciprocity, and there were no foreign branches there.

[11] This may be breaking down. *World Business Weekly* (Sept. 15, 1980; pp. 50-51) reports that Deutsche Bank has opened a subsidiary in Geneva in an apparent unilateral violation of the gentleman's agreement. The subsidiary will confine itself to investment and portfolio management. Other German banks are also entering Switzerland in their own names or indirectly.

[12] In private conversation, an officer of one of Mexico's largest banks stated that in his opinion, his bank was confident of its ability to compete. He felt that the policy of restrictiveness now owed more to a general national concern with domination by the U.S. and less to any fears on the part of the domestic banks.

Under the most recent Canadian Banking Act (1980), foreign banks will be able to establish banking subsidiaries. In fact, they will be encouraged to convert their existing Canadian financial subsidiaries to banks. The government is not abandoning the principle of ensuring that the country's financial system remains predominantly in domestic hands. It is imposing an overall limit on the foreign sector of 8% of total banking system assets. How it will administer this is still unclear.

Two considerations may have held the major Canadian banks from voicing public opposition to the change. First, the "big five" (of 11) are multi-nationals and the reception they receive abroad is not independent of the treatment Canada accords to the foreigners. Second, banking in Canada is highly concentrated (the top five banks had 90.4% of total chartered bank assets in 1977) and the government has become increasingly attentive to calls for more effective competition and innovation in the financial markets (Vorstermans [1978]).

Several countries where much of the banking system was foreign-owned have used forced divestiture requirements to bring about majority domestic ownership. Three cases in point are Morocco, Nigeria, and Saudi Arabia.

Prior to 1973, most commercial banks in Morocco were foreign-owned. The nationalization policy that began in that year required 50 percent Moroccan participation in all indigenous banks. In the same year, the Nigerian government acquired 40 percent of the shares of the three largest foreign-owned banks in that country. At the time, ten of the twelve commercial banks were foreign-owned. In 1977, the government promulgated a decree requiring 60 percent Nigerian ownership in all banks. While the government itself generally acquired all the divested shares, the policy was put forward as one of nationalization rather than socialization. In Saudi Arabia the government is permitting little new entry, and since 1975 it has required foreign bank subsidiaries to sell at least 60 percent of their shares to Saudi citizens. Before the inception of "Saudi-ization," the proportion of Saudi-owned banks to foreign ones was, as in Nigeria, two to ten. In each of these cases, one might suspect that the countries have been able to pursue these policies because of an advantageous bargaining position based on natural resource wealth.

In fact, at least in the cases of Saudi Arabia and Nigeria, one can think of the nationalization as a form of "windfall profits" tax. The OPEC-engineered oil price increases have made banking in these countries suddenly very profitable. The forced divestiture provisions ensure that much of this profit goes to those nationals in a position to take up the shares, rather than to foreigners. This result is consistent with Breton's [1978] argument that the primary effect of nationalistic policies is to alter the distribution of measured wealth in favor of society's better-off citizens. The key point is that nationalistic policies may stem from parties' self-interest as well as abstract ideals.

A concern with *dependence of the second kind*—the commodity composition, concentration, and technical level of the country's output and trade—might lead to some freeing of entry. Countries might look to foreign banks to facilitate trade, provide access to international capital markets, and improve local capabilities (see sections 4.6, 4.7 and 4.9). It might also lead them to encourage the geographical expansion of one or more of their own banks to act as national "flagships." This in turn could lead to a concern with reciprocity which would also work in the direction of encouraging some reduction in restrictiveness.

A concern with *dependence of the third kind*, inclusion in the international capitalist system, must work against the government opening its domestic market to foreign banks. We have developed an indicator of anti-capitalist orientation based on type of political system. We distinguish two categories of countries: those with one-party Socialist or Communist political systems on the one hand, and all others on the other. We would argue that the former are the countries most likely to have an ideological antipathy to the international capitalist system. Table 8 presents the results of cross-tabulating this variable with our usual regulatory scale. We find the expected relationships; that is, countries with one-party Socialist or Communist regimes tend to be closed or very restrictive, and countries without such systems tend to be restrictive or relatively open.

We would also expect an anticapitalist orientation to work against the country permitting its own banks to open offices abroad, but to a lesser degree. In Table 9 we take the countries with GNPs greater than or equal to US $5 billion, and categorize them separately by their type of economy and whether or not they have one-party Socialist or Communist regimes. We then calculate the average number of branches or subsidiaries in New York or London for the countries which fall in each of these categories, relative to their GNPs. The countries in the first and fifth rows do have branches in the two centers, but the averages are notably smaller than the averages for the other categories. In part, this is because their banking systems are so highly centralized that they have relatively few banks. Even so, the differences in means are quite striking.

TABLE 8

Degree of Openness/Restrictiveness
and Socialist or Communist One-Party System

		Socialist or Communist One-Party System	Other
Degree of Openness/ Restrictiveness	5	3	43
	4	0	17
	3	3	41
	1 + 2	12	19

$$\chi^2 = 50.615 \ (p \leq 0.001)$$

Cramer's V = 0.606

TABLE 9

Branches or Subsidiaries in New York or London
Per U.S. $1 Bil. of GNP for Countries with GNPs of U.S. $5 Bil.
or More, By Economic System and Political System

		Mean	Standard Deviation	Range	No. of Countries
Economic System	Socialist	0.04	0.04	0-0.13	11
	Capitalist Socialist	0.14	0.17	0-0.59	12
	Capitalist-Statist	0.19	0.22	0-0.86	17
	Capitalist	0.21	0.21	0-0.74	24
Political System	One-Party Socialist or Communist	0.05	0.06	0-0.21	13
	Other	0.19	0.21	0-0.86	50

4.3 The Domestic Banking Industry

A government may choose to protect the domestic banking system when it fears the effects of the competition foreign entry may bring. This leads to the questions of why a government should concern itself with the consequences of competition and why the domestic industry might be vulnerable. The two questions are interrelated. Some of the causes of vulnerability define the consequences which could follow entry. There are a number of nonexclusive situations that might lead to protection of the local banking industry—for example, when it is in its infancy, "constrained," inefficient, "overbanked," or cartelized.

Infancy is a question not so much of age as of a perceived ability to compete. If the local banks are small and technically unsophisticated, the government may, with or without their urging, decide to protect them from entry. For instance, Mexico and Norway both cite the fragmentation of their banking systems as a reason for barring foreigners. In both countries there are a large number of small banks, though neither system is new. As discussed earlier, the authorities may also use restrictions to help create a domestically owned industry.

Our indicator of the ability of the domestic banking sector to face foreign competition is the number of banks from that country which rank among the world's top 300 [*The Banker*, June 1979]. We limit the sample to those non-Communist countries with GNPs of $5 billion or more, i.e., roughly those countries which conceivably might have banks of the requisite size. We then divide the resulting variable into two categories: one or no world-class banks, and two or more such banks. The reason for defining the categories in this manner is that the presence of only one very large bank may represent a situation of effective monopoly, with the bank being unused to the presence of rivals. We cross-tabulate the variable against the regulatory scale. As Table 10 shows, countries with two or more world-class banks tend to be less restrictive than those with fewer.

A government may also discriminate against foreign banks if its policies constrain the domestic industry. Governments frequently impose special requirements on domestic banks that limit their ability to compete with foreign banks. Credit controls or allocation schemes, or a requirement that banks grant preferential loans to local governments or nationalized industries are not uncommon. In

TABLE 10

Number of Banks in the World's Top 300 Banks
and Degree of Openness/Restrictiveness

		No. of Banks	
		$n \leq 1$	$n \geq 2$
Degree of Openness/ Restrictiveness	4 + 5	8	12
	3	14	8
	1 + 2	9	2

χ^2 = 13.828 ($p \leq 0.001$)
Cramer's V = 0.511

effect, the government is involving the banking system in cross-subsidization, taxing some bank customers in order to provide others with services below cost. If the host government excuses foreign banks from the same requirements (perhaps on de minimis grounds), it may feel compelled to impose other constraints to approximate an overall competitive parity, or more probably, to put foreign banks at a relative disadvantage.

If the beneficiaries of the cross-subsidization policy are retail customers, especially rural ones, and the "tax" is borne by corporate customers, the implications for foreign entry are clear. Foreign banks must be excluded or restricted since one can expect them to "cream-skim." That is, they will compete in the corporate market by offering the same services as domestic banks but at a lower price. They are very unlikely to operate rural or even urban branch networks and thus at worst can keep the remaining "tax revenue" for themselves, or at best compete it away. Given sufficient foreign entry, the whole structure of subsidies and taxes would collapse, resulting either in major losses for the domestic banks or, if it is permitted, the wholesale abandonment of rural branches. The effect of these considerations can be seen in the cases of India and Australia.

In the 1950s and 1960s, the Indian government wished to encourage the extension of banking to the rural areas where the bulk of the populace lives. The private banks, which were associated with major industrial groups owned by particular families, were relatively obdurate. The government-owned State Bank of India, the largest in the country, complied with the policy; however, because it was in competition with the private banks, it could do so only to a limited degree. In 1969, therefore, the government took over the fourteen largest banks, bringing almost the entire banking system under its direct control.[13] It also banned further foreign entry and restricted the already present foreign banks to their existing number of branches. Following the 1969 socialization, there was a major increase in rural branching by all the now government-owned banks [Chitre, 1978]. In 1980, the Indian government socialized almost all the remaining private domestic banks.

In Australia, one of the major reasons put forward by the commercial banks for their continuing monopoly of full banking licenses and, in particular, of foreign exchange business is the fact that they provide an extensive network of retail banking services [McGuiness, 1979, p. 67]. Whether or not their argument is valid, one can infer from the fact that the foreign banks' financial subsidiaries are very interested in entering this market that the foreign exchange business is quite profitable.

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[13] At the time of the banking sector socialization, the State Bank of India already had a market share of 35%. The takeover brought the government another 50%. The remaining market share was split between the foreign banks (9%) and other domestic private banks (6%).

The presence in the banking system of government-owned banks can lead to restrictions for reasons other than that banks pursuing social goals are forced to compete with those pursuing private ones. An additional reason for the association between government ownership of major commercial banks and restrictiveness is that these banks may be particularly inefficient.

Crain and Zardkoohi [1980], among others, have shown that government-owned firms use more labor than do comparable private ones. Chitre [1978] found a similar tendency in the behavior of Indian banks after socialization, as well as a tendency for operating expenses per employee and per branch to increase more rapidly than the rate of inflation. Narasimhan [1978] reports that service in the socialized banks in India has deteriorated, and that customers are victims of slackness and inefficiency. More generally, Short [1979] found that government ownership was negatively related to profitability for banks from Canada, Western Europe, and Japan.

If these findings are generalizable, then for many countries permitting entry would result either in a crisis for government-owned banks or in the accrual of excess profits to foreigners. Protection, then, is a logical outcome.

A number of countries have barred new foreign bank entry on the grounds that the domestic system is in danger of being "overbanked." Basically, "overbanking" means that actual or incipient overcapacity in the industry is such that intensified competition would drive some institutions out of the market.

While banks and regulatory authorities frequently refer to the problem as a rationale for protecting a cartelized situation, there are more legitimate reasons for concern. First, failure of one bank as a result of competition could, in the absence of deposit insurance, result in a run on other banks, hence disrupting the banking system and perhaps even causing the failure or otherwise sound banks. Second, as just discussed, which banks are likely to be driven out may be an important consideration. Third, in a world of imperfect information, potential entrants may misread the market as being profitable because of their unfamiliarity with it, or its attractiveness may be a temporary phenomenon accompanying a boom. Their entry could then bring about the consequences just mentioned without effecting any offsetting benefits such as a more efficient domestic banking system. Hence, the regulatory authorities, who are charged with a concern for external effects and who are the only party with cost and profit information on all the banks, have a duty to intervene.[14] The monetary authorities efforts to curtail a boom could bring about a credit crunch which could drive weaker banks into insolvency.

It is interesting that in several cases in the sample, closure to entry—foreign and perhaps also domestic—followed a recent increase in the number of banks established.[15] In the United Arab Emirates, a large number of foreign banks entered after the 1973 oil price increase. The monetary authorities adopted a highly restrictive entry policy affecting both domestic and foreign banks after a banking crisis in 1977, during which two banks (one local and one foreign) became insolvent.[16]

If the domestic industry is cartelized, some domestic banks may have survived despite a lack of efficiency relative to banks from more competitive countries. Cartelization may also give others excess profits. Both groups of banks would then have reason to press for protection from entry. The government may still tolerate the cartelization, even where it has not actually organized it, as a way of assuring depositor safety. It might view the costs of this policy as the price to consumers of the insurance they receive.

We have no comprehensive information on the existence of cartels. Concentration, for which data is also hard to find, only indicates the potential for cartelization, but does not prove its existence, though Short [1979] did find a positive relation between concentration and profit rates in Canada, Western Europe, and Japan. However, the effect was small, requiring large changes in concentration to change profit rates by one percentage point.

Cartels may exist without substantial concentration if the government tacitly accepts or actively sponsors them. In fact, cartelization may coexist with open entry if government requirements or a concern for "good corporate citizenship" induces entrants to join the cartel. In Hong Kong, for instance, foreign banks are members of the committee that determines interest rates, though recently there have been complaints that the cartel's rates discriminate against recent entrants [Goodstadt, 1979]. The government fostered the creation of the cartel in 1964, after interest-rate competition caused the failure of several banks. As the examples of Hong Kong and Australia indicate, while cartelization may on occasion be associated with restrictiveness, it remains difficult to disentangle the cases where the operative factor is government concern for the stability of the banking system and depositor safety from those cases in which the regulators have been captured by the domestic industry.

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[14] One can make even more sophisticated and justifiable arguments for entry control in general. Bittlingmayer [1981] points out that under certain conditions, no competitive equilibrium is possible. Competition will become cut-throat and the industry will be characterized by frequent bankruptcies. Kenneth Koford pointed out in private conversation that non-price competition in the form of branching may result in socially sub-optimal levels of investment. Both these approaches may have some validity for banking in general, but seem less compelling for the case of foreign banks in particular.

[15] The cases are: Bahrain, Hong Kong, Jordan, Netherlands Antilles, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

[16] The two were the Ajman Arab Bank and the Janata Bank. The latter is owned by the government of Bangladesh. It has since reopened, following an infusion of capital.

One can argue that the capture of the regulators by the regulated in these cases is in the means of regulation, rather than in the ends. Proving the point though, requires that one show that the regulators had a choice of administrative technologies at the time the current pattern was set, and more importantly, that they have not extracted a commensurate quid pro quo.

The role of cartelization, (or, more generally, anticompetitive practices) in causing official restrictiveness is further obscured by the possibility that given the former, the latter is less necessary. In West Germany, for instance, banks may own the shares of other companies, and deal in them. They may also vote shares which as brokers they have bought for customers and which have been entrusted to them for safekeeping. As a result, bank influence over corporate policies may be quite great. Close bank-company ties make it difficult for foreign banks to make customers of major domestic corporations. Thus, while Germany is quite open as far as regulations are concerned, in actual practice it is less so.

4.4 Depositor Safety

The efficiency of the banking system as a payments system and as a source of a relatively riskless asset for households requires that retail banks be safe, i.e., have a very low probability of default. In the absence of some assurance that deposits are safe, prudence forces depositors to maintain accounts in several banks, presumably after having investigated each. This imposes extensive transactions costs on banks and depositors alike, and can be expected to reduce the utilization and utility of the banking system.

Governments have devised various ways of achieving the desired level of safety. There are a number of common ones. Frequently, the government owns the major retail banks, and especially the savings banks. It may engage in solvency regulation, that is, it may so regulate the riskiness of banks' portfolios, or the degree of leverage, as to render the probability of depositor losses effectively zero. The government may limit competition by permitting cartels or prohibiting price competition. Often, it insures deposits implicitly, either by standing ready itself to rescue any failing bank or by compelling other domestic banks to effect the rescue. One fairly rare alternative is explicit deposit insurance. Usually, the authorities pursue a mix of these policies. Even where explicit insurance is used, the fact that the banks pay a premium for the insurance that is a fixed proportion of the amount covered means that the authorities must also engage in solvency regulation as a response to problems of moral hazard [Eizenga and Giddy, 1979].

No matter which course the government pursues, the concern for depositor safety will influence its attitude towards foreign banks. First, the government will be concerned with the effect of competition on the viability of existing domestic banks, since if any fail de facto they will become a charge on the public. We have already dealt with this issue in the preceding section. Second, it will have to face the problem of the safety of deposits in foreign banks. Many countries solve this problem by limiting foreign bank access to such deposits, or by imposing more restrictive prudential requirements. Table 2 gives the various types of regulations and the number of countries utilizing each one. Some countries may impose several different types of measures.

Branches pose a particular problem for regulatory authorities since they are more or less integral parts of the parent: if the parent fails, the branch fails. It is unclear, and probably depends greatly on local law, whether local depositors would have first call on the branches' assets, or whether they would join all the other claimants against the parent and share pro rata in any recovery on the basis of the bank's total assets. While failure depends on the condition of the parent, its books are beyond the reach of local authorities.

These problems do not apply in the case of subsidiaries. The subsidiary does not fail simply because its parent has. Furthermore, the regulations governing a subsidiary are quite clear: local depositors have first call on its assets, and regulatory authorities can examine its books and operations. Of course, unlike a branch, nominally a subsidiary may fail without the parent failing. In actuality, parents usually are considered reponsible for their subsidiaries.[17] Also, failure of a subsidiary is still somewhat under the authorities' control.

In Table 11 below, we examine the relationship between restrictions on deposit taking and the forms of entry permitted foreign banks. We look only at those countries where entry in some form is

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[17] After the failure of Bankhaus Herstatt in Germany in 1974, the central banks of twelve major countries met in Basle at the Bank of International Settlements to establish more explicit procedures for cooperation in the event of a crisis and formed a committee to discuss problems of international bank supervision. They agreed, inter alia, that where an overseas subsidary sustains a loss, the parent is responsible and will be supported by its central bank if necessary.

TABLE 11

Form of Entry Permitted

		Deposit Restrictions	
		No	Yes
Form of Entry	Subsidiaries But Not Branches	7	1
	Branches But Not Subsidiaries	1	3

$a = 3.044$ ($p \leq 0.026$)

permitted; our analysis concentrates on those where branches are authorized and subsidiaries prohibited, or vice-versa.

As the log odds indicate, there does seem to be an association between the two dimensions of the table. Of the three countries in the lower right-hand corner, two restrict foreign banks to transactions related to international trade. The one country in the lower left cell does not impose restrictions on deposit taking per se. It does, however, require higher capital adequacy ratios relative to deposits for foreign banks than for domestic ones, though the former are exempt from certain other prudential regulations.

Only 12 countries, other than the United States of America, have explicit deposit insurance or are in the process of establishing such schemes [McCarthy, 1980].[18] There is a positive association between the existence of deposit insurance and openness toward foreign banks, but it is not at all statistically significant whether one includes the countries with socialized banking systems or not. Too few countries have insurance to permit much further generalization, especially since in a number of cases the insurance is irrelevant.

In India over 90% of banking system deposits are now in government-owned institutions. In the Netherlands, the insurance scheme is funded on the basis of ex-post assessments, reflecting the industry's view that the authorities are unlikely to allow any institutions to fail [Eizenga and Giddy, 1979]. In Japan too, the government will not permit bank failures.[19]

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[18] The twelve are, with dates of establishment of the scheme in parentheses: Argentina (1979), Canada (1967), Chile (1977), W. Germany (1966), India (1962), Japan (1971), Lebanon (1967), Netherlands (1979), Philippines (1963), Spain (1977), Turkey (1960), and The United Kingdom (1973).

One can think of solvency regulation, suppression of competition, encouragement of bank mergers, etc., as ways of protecting depositors by protecting banks. One can make a good argument that this is inefficient since it protects management and stockholders, who are presumably responsible for their institution's problems, or are expected to bear risk, as well as depositors. As such, one might take the absence of deposit insurance accompanied by an unwillingness on the part of regulators to allow banks to fail as an indication of capture of the authorities by the industry. This conclusion is not clear.

Deposit insurance is a relatively new administrative technology. No country other than the United States had established such schemes before 1960, and for a third of the countries they are less than 3 or 4 years old. Rather, most countries' policies with regard to depositor safety are a consequence of massive country-wide failures, particularly in the 1930s. Only in some extreme sense were these the fault of management or owners, and at the time, only the United States authorities managed an innovative response, partially because insurance had been tried there before at the state level [McCarthy, 1980]. One has the impression that deposit insurance is only now coming to be adopted, and only in countries that are oriented towards the free operation of the market, and that are administratively capable of handling the complex bank examination required.

4.5 Relations with Other Governments

As Krasner [1976] points out with respect to international trade, openness (defined as a regime in which tariffs are falling, trade proportions are rising, and regional trading patterns are becoming less extreme) is more likely to occur during periods when a hegemonic state is in its ascendency. Gilpin [1971] argues that "politics determines the framework of economic activity and channels it in directions which tend to serve the political objectives of dominant groups and organizations" and "the multinational corporation exists because it is consistent with the political interest of the U.S." The key point is that nations do not formulate their policies in an international vacuum. Openness to foreign banks may be influenced by political, military, or economic alliances between states.

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[19] Private communication from a very senior ex-official of the Ministry of Finance.

We will examine two illustrative cases: the EEC and the Andean Pact. In the first case, each member country is required to be open to entry by institutions from all other members. In the second, the policy has been one of exclusion or restriction of non-Pact member countries.

The EEC has a long-range goal of gradual harmonization of member countries' banking regulations and full mutual freedom of banking activities. While little progress has been made toward the first goal, the second has been achieved, at least nominally.[20] We would classify all the members as open, at least toward each other. Following Denmark's entry into the community, the EEC amended its bank regulations to allow foreign banks to open branches, irrespective of whether or not they were from member states. Ireland, by contrast, opened entry in branch form only to banks from countries within the EEC. Banks from other countries are restricted to subsidiaries, and are subject to operating restrictions.

Currently, Spain, Greece, and Portugal are negotiating entry into the EEC. All are restrictive but are currently amending or are expected to amend their regulations to bring them into conformity with the principle of open entry.

In 1978, the Spanish government authorized new foreign bank operations for the first time in forty years. All in all, twenty-one banks received authorization to open branches over the subsequent two years. Of these, six are from the U.S., one is from Japan, and the remaining fourteen are from the EEC. Operating restrictions are still extensive, but this may change as the Spanish banks adjust to the competition.

Following its revolution in 1974, Portugal socialized the banking system and barred further foreign entry, though the three existing foreign banks were permitted to continue operating. In December 1979, a coalition of center-right parties won the elections and formed the government, which plans to reauthorize the establishment of private banks. Foreign banks are being permitted to open representative offices, and may be allowed to establish investment companies [Caplan, 1978]. Part of the motivation for these policies is harmonization with EEC practice [*World Business Weekly*, May 13, 1980, p. 38].

In Greece, the banking system is highly concentrated, very heavily regulated, and to a great degree socialized de facto. Increasingly aware of the need to move closer to European systems as

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[20] For instance, the EEC is split over the issue of secret reserves. The UK, Ireland, and Denmark object to using secret reserves to "smooth" as reported annual results. In the other six member countries this practice is widespread [*World Business Weekly*, December 22, 1980; pp. 50-51]. It is often argued that it countributes to depositor confidence in the banking system.

Greece's accession to the EEC approaches, the government has established high-level working parties to study the financial system and to make recommendations for improvements [Pryce, 1978].

The Andean Pact (Cartagena Agreement) of 1969 is an attempt to establish a regional common market among its member nations (Bolivia; Colombia; Ecuador; Peru; Venezuela; and, originally, Chile). The Andean Foreign Investment Code, an important part of the Pact, urges common adherence to strict rules which severely limit foreign ownership in key sectors, including banking. As a result, two of the current five members are virtually closed to foreign banks, and the others have imposed a variety of operating and ownership restrictions. Even so, the countries have not followed entirely consistent policies. Venezuela, the last to join the Pact, is the most restrictive. It also has the largest market and is the richest of the five. Bolivia is the most open, and the poorest. The other three fall betwen these extremes both in wealth and degree of restrictiveness. Chile, under Allende, was very restrictive. It socialized the entire banking system and expelled all but one foreign bank (Banco do Brasil). Following the overthrow of Allende, the new government withdrew from the Pact and now encourages foreign bank entry with a view to making Chile a regional financial center.

These two regional cases provide an interesting contrast. Membership in the EEC is attractive enough that various countries are willing to give up some measure of control and protection of their banking systems as part of the price of entry. The Andean Pact, on the other hand, is unable to enforce an equivalent (though opposite) subordination of national policies.

4.6 Source of Funds

Developing countries may welcome foreign banks because of the role they can play in bringing in capital. While the amounts brought in directly may be quite limited, the country may believe the banks to be catalysts for its borrowing in international markets, or for other private flows. The paragraph below is from the Bank of Thailand's 1977 *Economic Report*. It refers to the bank's decision to permit the establishment of the European Asian Bank, the first approval in ten years.

> The establishment of a branch of a German commercial bank in Thailand might bring benefits to the Thai economy, and encouraged [sic] investors from the EEC to give increased interests [sic] to Thailand. In permitting the European Asian Bank to open a

> branch in Thailand, important conditions were attached, for instance, the Bank must bring in capital from its head office and/or from the other overseas branches of bank not less than B[aht] 100 million within a period of two years, and on the opening day the Bank must have brought in at least B 50 million to be maintained as assets as stipulated.

If a country has access to world capital markets, it can afford to be more restrictive towards foreign banks than if it does not. Lees and Eng [1979] used various economic criteria to group some fifty-one developing countries into four categories in terms of their increasing ability to tap various sources of international funds. In Table 12 we compress the four access and the five regulatory categories into two each. As the log odds show, there is a statistically significant negative relationship between the two dimensions. In the sample, LDCs with greater access to international capital markets are freer to restrict foreign banks than are those with less.

TABLE 12

LDC Access to World Capital Markets
and Degree of Openness/Restrictiveness

		Access	
		High	Low
Degree of Openness/ Restrictiveness	4-5	6	13
	1-3	20	9

$$a = -1.572 \ (p \leq 0.001)$$

4.7 Trade Promotion

It has often been contended [e.g., Grubel, 1977], and it now appears that there is evidence that banks follow trade [Terrell, 1979; and Tschoegl, 1979]. Banks can also facilitate trade by acting as conduits for market information, and through their financing and operational activities (letters of credit, bankers' acceptances, money movement, etc.). Countries concerned with expanding exports may therefore welcome foreign banks, at least as long as they limit their activities (or are restricted) to international business. The most striking examples of the operation of this factor involve three Communist countries: The People's Republic of China, Rumania, and Hungary.

When the Communists took over China in 1949, they permitted four banks to maintain one branch each in Shanghai.[21] These branches continued to operate even during the Cultural Revolution. Very recently, the government has allowed several additional banks to open representative offices.

Rumania is the only other Communist country which permits foreign-owned banks to open branches. Only one U.S. bank has taken advantage of this opportunity, and it is restricted to hard currency transactions for the sole purpose of facilitating foreign trade.

TABLE 13

Ratio of Imports to GNP and Degree of Openness/Restrictiveness

		$R \leq .2$	$.2 \leq R < .4$	$R > .4$
Degree of Openness/ Restrictiveness	5	8	16	20
	4	3	10	4
	3	12	19	15
	1 + 2	13	13	4

$\chi^2 = 18.932$ ($p \leq .005$)
Cramer's V = 0.273

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[21] The four are: Chartered Bank, a British overseas bank with wide representation in Asia and which is part of the Standard Chartered Group; Bank of East Asia, from Hong Kong; Hongkong and Shanghai Bank, another British overseas bank, but with headquarters in Hong Kong; and Overseas Chinese Banking Corporation, from Singapore.

Hungary has just authorized the establishment there of a majority foreign-owned joint venture. The Hungarian partner, the National Bank of Hungary, has the largest shareholding (34 percent). The foreign participation is split equally among six banks, two from Japan and four from various European countries.[22] The bank will concentrate primarily on trade-related activities.

More generally, we have developed a variable for the importance of trade, particularly imports, to the national economy. The variable categorizes the ratio of imports to GNP. The dividing points were chosen to yield three categories with roughly similar number of countries in each. While neither the chi-square statistic nor the degree of association in Table 13 is impressive, the direction of the relationship is as hypothesized.

4.8 Reciprocity

A country may open its market to foreign banks because it wishes to gain access to foreign markets for its own banks. A number of countries require such reciprocity either explicity in their laws or implicity in their approval practices. Some countries, particularly those that wish to be the home for an international financial center, do not insist on reciprocity at all (e.g., the U.K.). For many, the whole question is irrelevant since they have no domestic banks willing or able to expand abroad. For those concerned with the issue, the definition of reciprocity they adopt cannot be independent of their domestic policies towards foreign banks.

The first, and potentially the most restrictive, definition is similar to a "Most Favored Nation" clause in trade agreements. Each country merely agrees, often implicitly, not to favor banks from one country over those from any other. Even this basic principle is occasionally violated.[23]

The second is a "tit-for-tat" approach. Country A permits country B's banks entry if its own may establish themselves in country B. Some countries insist on some form of numerical parity, i.e., a branch-for-branch rule. This provides them with a mechanism for restricting entry, as well as gaining it. Brazil, for instance, argues that since U.S. banks have some fifty-six branches there, and its banks have only ten in the U.S., it is actually more than accommodating, even though it has permitted almost no new entry since 1964. Interestingly enough, in 1980 Brazil and Venezuela, by special agreement, each permitted one bank from the other country to open a branch.[24]

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[22] The six are: Creditanstalt Bankverein (Austria), Banca Commerciale Italiano, Long Term Credit Bank (Japan), Taiyo Kobe Bank (Japan), Société Générale (France), and Bayerische Vereinsbank (W. Germany). In addition, Société Générale, Banque Nationale de Paris, Creditanstalt Bankverein, Banco di Sicilia, and National City Bank of Minneapolis are reported to have representative offices in Budapest.

[23] Qatar, for instance, follows the practice of placing government funds with local banks, British banks, and other foreign banks, in that order. Gabon, on the other hand, favors French banks. As we noted earlier, Malaysia bans foreign banks that are government-owned. Obviously, this will have a differential impact depending on the nature of the banking system in each potential home country.

The third definition is that of "national treatment," i.e., the absence of discrimination in law or practice between foreign and domestic banks. While a "Most Favored Nation" approach is consistent with any domestic policy towards foreign-owned banks, a demand for "national treatment" requires a similar domestic policy.

Finally, the fourth definition is that of "home country powers." This is the doctrine that Country A's banks should have the same powers in Country B that B's have in A. Such an approach is really only open to countries whose domestic banking sectors are relatively unregulated. They can then justify less-than-national treatment of foreign banks and entry restrictions, since few countries would reduce their domestic regulatory practices to this lowest common denominator. Switzerland, to the best of our knowledge, is the only country that has adopted this approach. Its major commercial banks have few branches or subsidiaries outside of major world financial centers and are not concerned with expanding their access, but rather with limiting competition at home.

We can get some indication of the role of reciprocity by calculating, for each category of our regulatory typology, the mean of the number of banks from a country with a direct presence in London or New York, relative to its GNP. Again, we consider only those countries with GNPs of $5 billion or more to eliminate those for whom the question is irrelevant. As Table 14 shows, there is a clear association between a country's openness to foreign banks and its representation in the two financial centers.

A concern with reciprocity may drive a wedge between those domestic banks that can take advantage of the opening of foreign markets and are secure in their domestic position, and those that see only the increased competition. A country's position on the issue of reciprocity will then depend in part on the political strength of the two groups. One possibly important factor is into which group the government-owned banks (if any) fall. Unfortunately, we have no data that would enable us to pursue this further.

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[24] The two banks were Banco do Brazil and Banco Union.

TABLE 14

Branches or Subsidiaries in New York or London
Per U.S. $1 Bil. of GNP for Countries with GNPs of U.S. $5 Bil.
or More, By Degree of Openness/Restrictiveness

		Mean	Standard Deviation	Range	No. of Countries
Degree of Openness/ Restrictiveness	5	0.20	0.22	0-0.86	23
	4	0.24	0.21	0-0.59	7
	3	0.19	0.23	0-0.74	12
	1 + 2	0.06	0.09	0-0.35	20

4.9 Enhancement of Domestic Financial Markets

A government may permit entry by foreign banks to increase domestic competition and to introduce new capabilities to the local financial markets.

Domestic banks may even welcome foreign bank entry, or at least not oppose it, for three reasons. First, there is the question, just discussed, of gaining reciprocal access to other markets. Second, the banks may be politically vulnerable to charges of attempting to protect a cartel. We have already discussed both of these considerations with respect to Canada in Section 4.2 above. The third reason is that having ready access to a large number of sellers who offer somewhat different products reduces search costs for buyers. Foreign banks are particularly likely to offer different products, since their knowledge, methods, and policies will not be the same as those of domestic banks. Search costs are analogous to a tax, and reducing them is equal to an outward shift of the demand curve facing the sellers, in this case the banks [Stuart, 1975]. Hence, the following statement: "While foreign banks may be more competition, they bring more business for everyone."[25] Because of the positive externalities generated, one could even argue that regulators should offer foreigners inducements to enter. If necessary, these could include subsidies and freedom from some regulations imposed on domestic banks.

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[25] Earnest Schneider, EVP, Irving Trust, quoted in *American Banker*, Aug. 8, 1977, p. 13. in reference to foreign banks in New York.

Spain provides an illustrative case of the role of the desire to enhance the domestic financial sector. Following the death of General Franco, and especially since the elections of June 1977, the Spanish government has moved to modernize the economy, particularly the banking and financial sectors [Muns, 1978]. It has freed certain interest rates and reduced the required ratio of investment in public and privileged activities. Savings banks are permitted to engage in the same activities as commercial banks. In addition, as discussed earlier, the government has started to authorize foreign bank entry to increase the competitiveness and efficiency of the local banking system. To ease the transition, foreign entry is being phased in gradually, and is surrounded with restrictions. As far as the government is concerned, there is clearly no need to induce the desired amount of entry. Moreover, the government seems committed to further liberalization, in spite of domestic pressures to the contrary.

It permitted Barclay's Bank, the only bidder, to purchase the ailing medium-sized Banco de Valladolid. On the other hand, pressure from domestic bankers forced the government to block New York's Citibank from buying into ICI, Spain's second-largest financial house (*World Business Weekly*, March 23, 1981).

While foreign banks' activities are concentrated on the wholesale end of the market, banking as a whole is becoming more competitive. The foreigners also succcessfully launched an acceptances market and have introduced the use of floating rates (*World Business Weekly*, April 13, 1981; p. 29).

One can speculate that the domestic banks were not able to block all foreign entry for two reasons. As discussed in Section 4.5 above, Spain wishes to join the EEC and openness is one of the prices it will have to pay. In addition, its willingness to inflict some losses on the banking sector may not be independent of the fact that this has long been one of Spain's cosiest business cartels and was particularly associated with the Franco regime.

4.10 Creation of a Financial Center

A country may wish to establish one of its cities as an international financial center. The gains would include tax revenues, balance-of-payments effects from the banks' earnings, employment, and reduced transactions costs, primarily for corporate users of financial services. Johnson [1976] estimated the employment and income effects for Panama but found them to be slight. McCarthy [1979] distinguishes two types of centers—"paper" and "functional." The former provide locations of record but no actual banking takes place in them. In functional centers, banks make loans and take deposits, though these may appear on the books of a branch in a paper center. McCarthy finds that the benefits to the host of the first type are limited to fees and the sums involved are minor. Functional centers are more advantageous to the sponsor, but the net effect is still limited because of the costs of providing the necessary infrastructure.

Nevertheless, the benefits are attractive to countries with limited alternatives. Of the sixteen offshore centers we can identify, ten are island-states and all the others are small, developing countries, except for Luxembourg which is simply small.[26]

The enticement of foreign banks would involve the country in competition with other countries in the areas of freedom from regulation [Giddy and Allen, 1979] and minimization of fees and taxes imposed. This does not necessarily mean that the country must change its policies towards its domestic market.

Several countries have completely separated the international and domestic markets by authorizing foreign banks to establish Offshore Banking Units. These branches generally are permitted little or no contact with the domestic market, but are given relatively wide latitude in their international activities. Of the four countries that authorize OBUs, none permits foreign banks to open branches or to have majority-owned subsidiaries to serve the local market.[27] The other eight off-shore centers discussed by McCarthy and for which we have data from the Comptroller's report we would classify as being relatively open or open. Three are currently closed to all new entry because the authorities feel there are now enough banks. Even these, however, were formerly open, and there do not seem to be any operating restrictions.

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[26] Islands: Anguilla, Bahamas, Bahrain, Cayman Islands, Hong Kong, Jersey, Netherlands Antilles, New Hebrides, Seychelles, and Singapore. Others: Lebanon, Luxembourg, Panama, the Philippines, Tunisia, and the United Arab Emirates. Sri Lanka, a small, developing country and an island is now also interested in drawing some international banking activity.

[27] The four are: Bahrain, the Philippines, Singapore, and Tunisia.

5. Conclusions: The Structure of National Political and Economic Systems and Its Influence On Openness

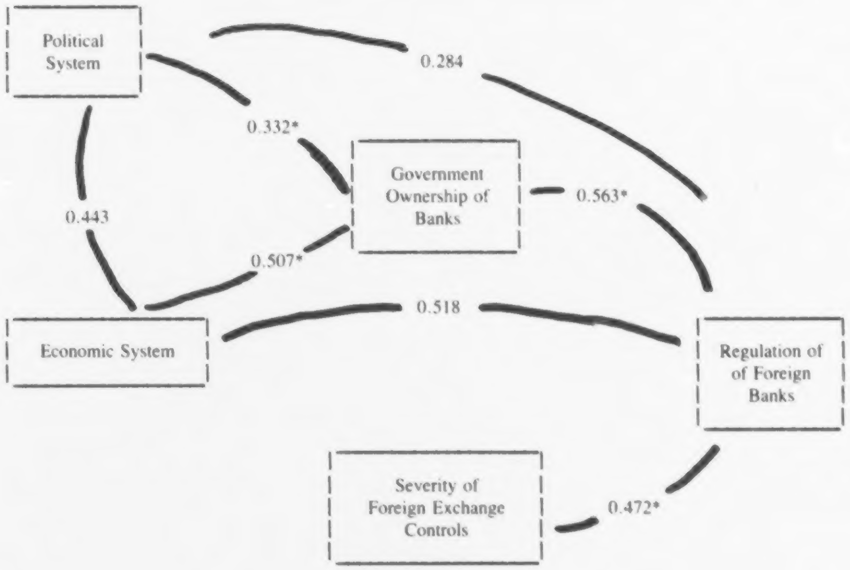
In this section we discuss primarily the interaction between the countries' political and economic systems, their governments' desire for control (as proxied by ownership of the banking system), and the regulation of foreign banks. In Figure 2, we diagram the degree of association between these variables. The numbers on the lines are the values for Cramer's V from the relevant cross-tabulations. Those marked with an asterisk are from Tables 6, 15, and 16. The others are from tables not presented in the paper.

First, we will discuss the relationships in the figure. Then we will consider some of the factors that we have discussed earlier.

A country's philosophy about the role of the state has an effect on its desire to control banking. We would argue that one of the operative factors is the nature of the political system and its tolerance for pluralism. In Table 15, we cross-classify countries by their political

FIGURE 2

Interactions


Political System
0.284
0.332*
Government Ownership of Banks
0.563*
0.443
0.507*
0.518
Economic System
Regulation of of Foreign Banks
Severity of Foreign Exchange Controls
0.472*

system and by the degree of government ownership of the banking system.[28] As the table indicates, there is a statistically significant relationship between the two dimensions. There are only two countries (Portugal and Nepal) with a completely socialized banking system and a multiparty political system. There are many countries which have more restrictive political systems but perhaps extensive private sectors. Finally, there are two countries (Burundi and Zambia) with one-party socialist or communist systems, but which permit banking to remain essentially in private hands.

Next, we cross-classify countries by their economic system and the degree of government ownership. Following Gastil [1978, pp. 43-51], we distinguish four types of economic systems: capitalist, capitalist-socialist, capitalist-statist, and socialist.

Gastil develops a four-fold typology of economic systems: capitalist, capitalist-statist, capitalist-socialist, and socialist. The

TABLE 15

Government Ownership of the Banking System
and Political System Type

		Government Ownership		
		Socialized Banking Sytem	Government Owns Major Commercial Bank	Essentially Private
Political System	Multi-Party	2	21	30
	Other	23	21	23
	One-Party Socialist or Communist	10	3	2

$$\chi^2 = 29.684 \ (p \leq 0.000)$$

$$\text{Cramer's V} = 0.332$$

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[28] As far as political systems are concerned, Gastil [1978, pp. 43-51] recognizes four major types, with seven subtypes. For our purposes, we distinguish only two: the multiparty category, and the socialist or communist one-party system category. Whenever we use either of these categories, all other systems are thrown into a residual category. Multiparty states do not include those where one party so dominates that any and all other parties exist in little else but name.

TABLE 16

Government Ownership of the Banking System
and Economic System

		Government Ownership		
		Socialized Banking System	Government Owns Major Commercial Bank	Essentially Private
Economic System	Capitalist	1	24	34
	Capitalist-Socialist	10	7	13
	Capitalist-Statist	6	14	9
	Socialist	18	1	0

$\chi^2 =$ 70.496 ($p \leq 0.000$)
Cramer's V = 0.507

characterizations are impressionistic and the dividing lines are necessarily arbitrary. In capitalist states, there is a general reliance on the operation of the market and on private provision for individual welfare. Capitalist-statist governments own very large productive enterprises and intervene in the economy in a major way, but not primarily on egalitarian grounds. Capitalist-socialist systems provide social services on a large scale, with the result that some private control over property is sacrificed. In Socialist states, the government strives programmatically to place the entire national economy under its control.

Our hypothesis is that as we go from capitalist to socialist, governments will be more concerned with detailed direction of the economy, and thus with any lack of control that a private or foreign bank presence might bring. The results in Table 16 are consistent with this view.

While Gastil does not make this entirely clear, the typology actually reflects two dimensions—one involving the degree to which the government directs the economy, and the other its commitment to redistribution on egalitarian grounds. Thus, following the first dimension, we would group the capitalist and capitalist-socialist types on the one hand, and the capitalist-statist and socialist types on the other. On the second dimension, we would group capitalist with capitalist-statist types, and capitalist-socialist with socialist types.

Doing so yields Tables 16-I and II. These reveal that our initial hypothesis and table masked this important distinction. While there is still an association between a governmental orientation towards control of the economy and ownership of the banking sector, this is not as strong as that between the latter and a concern with redistribution. Presumably then capitalist systems are particularly open, and socialist ones particularly closed since they are respectively low and high on both dimensions.

A country's political and economic systems are related, though not necessarily very strongly. On the one hand, of the twenty-seven countries that have socialist or communist one-party systems, or socialist economies, eighteen fall into both categories. On the other hand, capitalist economic systems are consistent with a variety of political systems.

The effect of a country's political system does not seem very strong, at least relative to that of the economic system. This is not quite correct, since as we have seen in Table 8, one-party socialism or communism is strongly related to closure to foreign banks. For countries with other types of political systems, though, it is the view of the role of the government as revealed in the economic system that is important.

It is these basic political-economic orientations that determine if some of the other considerations discussed earlier come into play. If a country bars all private banks, it need not concern itself with dependence, the ability of its banks to compete, the effect of entry on the domestic banking system, depositor safety, or the enhancement of domestic financial markets. Only when a country is basically willing to allow private banks to operate does it have to face the question of extending this right to foreign-owned institutions. We can therefore think of the cost-benefit calculus as being a second step, conditional on the country's basic orientation. Those countries that wish to have socialized systems may nevertheless permit some entry because of the role of foreign banks in facilitating trade. Those that permit the existence of an extensive private banking sector may, however, be very cognizant of the costs of foreign entry.

Dependence emerges as one of the most important of these "second-stage" cost considerations. A fear of the dominating presence of foreigners and the perceived ability of domestic banks to compete are inversely related. Even so, objective measures and the perceptions of the government or the populace at large may be at variance with each other. In fact, the real situation may be irrelevant. Given the importance which governments and people attach to the banking sector, close proximity to particular foreigners may lead to policies of closure despite the country's basic political-economic orientation or the capabilities of its own banks.

These considerations give rise to the following simplified

TABLES 16-I & II

Government Ownership of the Banking System
and Orientation of the Economic System

TABLE 16-I

			Socialized Banking Sytem	Government Owns Major Commercial Bank	Essentially Private
Control Orientation	Lo	Capitalist & Capitalist-Socialist	11	31	47
	Hi	Capitalist-Statist & Socialist	24	15	9

$\chi^2 =$ 26.261 ($p \leq 0.005$)
Cramer's V = 0.438

TABLE 16-II

Redistribution Orientation	Lo	Capitalist & Capitalist-Statist	7	38	43
	Hi	Capitalist-Socialist & Socialist	28	8	13

$\chi^2 =$ 40.710 ($p \leq 0.005$)
Cramer's V = 0.545

model. We can think of each country as asking itself three questions, in order:

Q1. Will we permit domestic private ownership in the domestic banking sector?
Q2. Will we permit foreign ownership in the domestic banking sector?
Q3. Given our answer to one and two above, do the remaining benefits outweigh the remaining costs, or vice-versa?

If the country's answer to either of the first two questions is "No," then one can expect that it will be at best restrictive towards foreign banks, and probably closed. If its answer to both of the first two is "Yes," then it will probably be open. In either case, the degree of restrictiveness, i.e., distance from the extreme position, will depend on the country's assessment of its answer to the third question, the residual cost/benefit considerations. Note that in the first question we have qualified private ownership with the word "domestic." In general, as we have assumed throughout this paper, a government's primary concern is whether it can accomodate the existence of a locus of control outside itself. If it cannot, then it does not matter whether this would be domestic or foreign. In some situations though, a government may be comfortable with the presence of foreign banks but not with that of domestic private ones.[29]

The foreigners may be held by law or economics to a relatively small role in the economy. However, domestic private banks are often parts of a small number of family-owned financial/industrial/commercial groups with a great deal of power, particularly in developing countries [Leff, 1976]. In these cases, and Portugal may well be an example, a revolutionary regime will socialize the banking system, while leaving the few foreign-owned institutions alone.

As a final qualification of the simple model, we must note that as far as the second question is concerned, not all foreigners are equally welcome or unwelcome. Countries may, in practice, be able to discriminate between origins. An international regime (rules of the game) that would permit them to do so might even result in greater total world openess than one that required non-discrimination.

The model suggests that one can decompose what is commonly termed "political risk" into three components: political philosophy, xenic, and industry risk. Each of these refers to changes in a country's response to the three questions above, respectively. The risk is the consequences for a foreign company's operations of a change in the regulatory environment accompanying the new answers.

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[29] I would like to thank Stephen J. Kobrin for forcing me to accept this point.

While we have not specifically examined the process of change in regulations in this essay, the cases and the model suggest some hypotheses.

1). Industry Risk. One can expect residual costs and benefits to change slowly over time. This will give rise to incremental regulatory changes which will take some time to occur and will probably give warning of their arrival from developments in the banking sector. One can also expect that a country's position on the first two questions will influence its reactions to new situations with respect to the third. Changes in the direction of the "home" pole are more likely to come about than those away from it, and to arrive more quickly.

2). Xenic Risk. We have no prior expectations about the time behavior of changes in a country's attitudes towards foreigners. These might be slow as a particular country's hegemony waxes and wanes, or might be quite rapid as with a wave of nationalism. In general, we would expect rapid changes to accompany changes in the response to the question of private ownership.

3). Political Philosophy Risk. Radical changes, i.e., those involving a switch in attitudes towards private ownership, will probably occur rarely, but quickly. They will accompany a major change in the make-up of government, especially due to a revolution. In democratic states, such a major change might occur after a party attains power after a long period, perhaps several decades, in opposition. These non-incremental changes will derive from macro-political changes in the country, and will give their warning, if at all, in areas outside the banking sector and frequently outside existing political and economic elites.

If these hypotheses are correct, they have implications for lobbying efforts by foreign banks or governments seeking a more liberal regime. Inducing a country to change its effective polarity would seem to be very difficult, if not impossible. Even efforts to encourage a closed country to become slightly more open would require great effort for small return. Encouraging a relatively open country to become more open would seem to hold more promise.

The first direction for further research is to improve the methods for measuring openness and restrictiveness, the desire for control, and the fear of dependence. With better measures of these variables the model can be improved. With better data and a better model, we can then proceed to investigate the dynamic hypotheses which we have just proposed.

Appendix

Country Ratings
(1979-1980)

1.	Afghanistan	1
2.	Algeria	1
3.	Argentina	5
4.	Australia	3
5.	Austria	5
6.	Bahamas	5
7.	Bahrain	3
8.	Bangladesh	2
9.	Barbados	5
10.	Belgium	5
11.	Belize	5
12.	Benin	1
13.	Bermuda	3
14.	Botswana	5
15.	Bolivia	4
16.	Brazil	3
17.	Bulgaria	1
18.	Burma	1
19.	Burundi	5
20.	Cameroon	3
21.	Canada	3
22.	Rep. of Cape Verde	5
23.	Cayman Is.	5
24.	Central African Empire	4
25.	Chad	NA
26.	Chile	5
27.	People's Rep. of China	1
28.	Columbia	3
29.	People's Rep. of the Congo	3
30.	Costa Rica	3
31.	Cuba	1
32.	Cyprus	4
33.	Czechoslovakia	1
34.	Denmark	5
35.	Rep. of Djibouti	5
36.	Dominican Rep.	3
37.	Ecuador	3
38.	Egypt	2
39.	El Salvador	3
40.	Ethiopia	1
41.	Fiji	5
42.	Finland	3
43.	France	5
44.	Gabon	5
45.	The Gambia	3
46.	German Dem. Rep.	1
47.	Fed. Rep. of Germany	5
48.	Ghana	3
49.	Greece	4
50.	Guatemala	3
51.	Guinea	1
52.	Guinea-Bissau	NA
53.	Guyana	3
54.	Haiti	3
55.	Honduras	5
56.	Hong Kong	5
57.	Hungary	2
58.	Iceland	3
59.	India	3
60.	Indonesia	3
61.	Iran	1
62.	Iraq	1
63.	Rep. of Ireland	3
64.	Israel	5
65.	Italy	5
66.	Ivory Coast	5

Appendix (cont.)

Country Ratings

67. Jamaica	5
68. Japan	4
69. Jordan	5
70. Kenya	5
71. Kuwait	2
72. Laos	2
73. Lebanon	4
74. Lesotho	5
75. Liberia	4
76. Libya	1
77. Luxembourg	5
78. Madagascar	1
79. Malawi	4
80. Malaysia	3
81. Mali	5
82. Malta	3
83. Mauritania	5
84. Mauritius	5
85. Mexico	3
86. Morocco	3
87. Mozambique	2
88. Nepal	1
89. Netherlands	4
90. Netherlands Antilles	5
91. New Zealand	3
92. Nicaragua	NA
93. Niger	3
94. Nigeria	3
95. Norway	1
96. Oman	5
97. Pakistan	4
98. Panama	5
99. Papua New Guinea	4
100. Paraguay	5
101. Peru	3
102. Philippines	3
103. Poland	1
104. Portugal	1
105. Qatar	3
106. Romania	2
107. Rwanda	5
108. Saudi Arabia	3
109. Senegal	5
110. Seychelles	5
111. Sierra Leone	5
112. Singapore	3
113. Solomon Is.	3
114. Somalia	3
115. South Africa	3
116. South Korea	3
117. Spain	4
118. Sri Lanka	5
119. Sudan	4
120. Surinam	4
121. Swaziland	5
122. Sweden	1
123. Switzerland	5
124. Syria	1
125. Taiwan	4
126. Tanzania	1
127. Thailand	4
128. Togo	5
129. Trinidad and Tobago	3
130. Tunisia	3
131. Turkey	3
132. United Arab Emirates	5
133. United Kingdom	5
134. U.S.S.R.	1
135. Upper Volta	4
136. Uruguay	3
137. Venezuela	3
138. Yemen Arab Rep.	5
139. Yugoslavia	1
140. Zaire	3
141. Zambia	5

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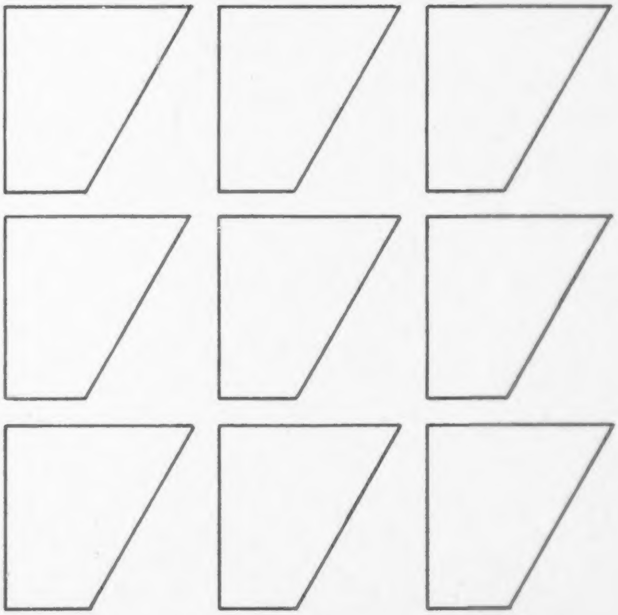
By Lawrence J. White



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Biographical Note

Lawrence J. White is Professor of Economics at the New York University Graduate School of Business Administration. His principal fields of research are industrial organization, regulation, and antitrust economics. His most recent book is *Reforming Regulation: Processes and Problems* (Prentice-Hall, 1981), and he recently co-edited (with Michael Keenan) *Mergers and Acquisitions: Current Problems in Perspective* (Lexington Books, 1982). During 1982 and 1983 he will be on leave from New York University to serve as Director of the Economic Policy Office in the Antitrust Division, United States Department of Justice.

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Abstract

This study tries to measure the role that small business has played in the U.S. economy in the past two decades. We first examine a number of the economic aggregates that might serve as the bases for measurement, and the advantages and drawbacks of each are discussed. We then turn to the data and find that, on a number of measurement bases, the relative position of small business has been declining across the entire economy. But this pattern is the product of two sub-patterns: more severe declines within individual sectors (e.g., manufacturing), cushioned by the shift of the economy away from manufacturing and mining and toward services, retailing, and wholesaling, where small business is more prevalent.

Monograph 1981–4

Measuring The Importance Of Small Business In The American Economy

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I. Introduction

For the defenders of and believers in small business, the world is best described by the opening lines from Charles Dickens' *A Tale of Two Cities*: "It was the best of times, it was the worst of times. . . ."[1] The titles of some of the sections of a recent report by the U.S. House of Representatives' Committee on Small Business can illustrate this point:

—Small business is the "cutting edge" of competition;
—Small business is the vanguard on innovation and invention.
—Small business is the Nation's job creator;
—Small business is a source of leadership;

but also

—Manufacturing assets and the decline of small business;
—Sales and the decline of small business;
—Industry concentration and the decline of small business;
—Retailing and the decline of small business;
—Small business: a major victim of inflation's "squeeze"[2]

Unfortunately, much of the discussion of the role of small business in America has been long on rhetoric and emotion and short on facts.[3] It should come as no surprise, then, that public policy with respect to small business has lacked coherence and consistency.

This monograph will have a number of purposes. First, we intend to demonstrate that a considerable amount of hard information can be marshalled to examine questions concerning small business—more information than is generally recognized to be available. But, second, the information needs to be handled and interpreted with great care. Definitions are extremely important, and the choice of measurement bases can strongly influence the outcomes that are perceived. And, third, we intend to provide some measurements of the importance of small business in the U.S. economy.

---

[1] Dickens (1859, p.23).

[2] U.S. House of Representatives (1979).

[3] See U.S. House of Representatives (1979) and U.S. Senate (1978).

In Section II we address the definition and measurement problems. We note the biases inherent in a number of measures and the problems posed by the absence of a standard definition for the upper limit of a "small business." These problems and the limitations of data availability force us to use a number of measurement bases and size cut-off points for our measurements; we also calculate Gini coefficients so as to incorporate broader size effects that might be hidden by a focus on a single size cut-off point.

Section III provides our measurements and major results.[4] The data show that the aggregate numbers of small businesses in the U.S. economy have continued to increase through all the time periods for which data are available; a picture of small business being decimated and no longer a significant factor on the U.S. economic landscape is simply inaccurate. However, the relative economic importance of small business in the overall economy has declined modestly during the past decades. Within most sectors of the economy, the decline of small business has been more severe. But this severe effect has been moderated by the changing emphasis of the overall economy—away from sectors like manufacturing, in which small business has not been prevalent, and toward sectors like retailing, wholesaling, and services, in which small business has been prevalent. Thus, an examination of the pattern in an individual sector, (e.g., manufacturing) frequently gives a misleading and more dismal picture than does an examination of the entire economy.

Finally, in Section IV we offer some brief conclusions from this study.

---

[4] Earlier surveys are found in Stockwell (1958), Duesenberry (1958), Markham (1958), McNulty (1958), and Weston (1968).

II. Definitions and Measurement Problems

At the beginning it is worthwhile establishing some definitions and discussing the measurement problems. Vagueness in these areas has frequently contributed to misunderstandings and misinformation concerning small business.

A. "Small Business"

Defining this term is crucial to a proper study. Unfortunately, there is no standard definition of "small business." Instead, the concept seems to be quite flexible, encompassing a number of different sizes of firms (U.S. SBA, 1977, part II). Following this tradition, we will not try to establish an absolute definition but instead will present results for a number of size classes.

B. Measures of Importance

This monograph will confine itself to economic concepts. Despite this restriction, there are a variety of measures that can be used to indicate the importance of small business: the number of firms, their assets, their sales, their profits, their employment, their payrolls, or their value added.

The economist's first choice in such matters is usually value added: the difference between sales revenues and the costs of raw materials, semifinished components, and purchased services. Value added thus measures directly the activity of the firm, encompassing the land, labor, and capital that the firm applies to the materials and services it has bought from other firms so as to produce the product or service which it in turn sells.

Unfortunately, value added data by size classes—the data needed for measuring the relative importance of small business—are collected and reported regularly only for the manufacturing sector. Data are more readily available for some of the direct or indirect components of value added: payrolls, profits, employment, and assets. But each partial measure has its problems. Because small firms tend to be more labor-intensive than large firms, measures based on employment tend to over-represent the relative *economic* importance of small firms. Since small firms also tend to pay lower wages, a payroll measure could either over or under-represent the importance of small business. Similarly, because small business tends not to be capital-intensive, measures based on assets or on profits will under-represent small business' importance. Also, double-counting will bedevil any asset data that include the financial sector, since the assets of the financial sector (e.g. loans) represent the liabilities of other sectors, which in turn have used the proceeds of those loans to invest in assets of their own (e.g. plant, equipment, and inventory). Further, measures expressed in dollar terms may require adjustments for inflation if comparisons over time are made. In this respect, employment measures, since they are in physical terms, have an advantage.

Sales revenue measures are also available. Again, because they are in value terms, they may require adjustments for inflation. Sales measures tend to over-represent the importance of firms that apply only a small amount of processing to purchased components and then resell them (e.g., a wholesaling or jobbing firm). Correspondingly, sales measures also tend to under-represent the firms that are more vertically integrated and attach more value added to the purchased components before they are sold. Further, there are obvious problems of double-counting when sales measures are used across a number of sectors. And the inclusion of the financial sector once again causes problems, since this sector measures its ''sales'' quite differently from other sectors. The financial sector typically reports as sales the gross commissions or fees earned (i.e., its gross margins). By contrast, a sector like retailing measures as sales the revenues from the sale of goods, which is the sum of its margins *plus* the wholesale cost of the goods.

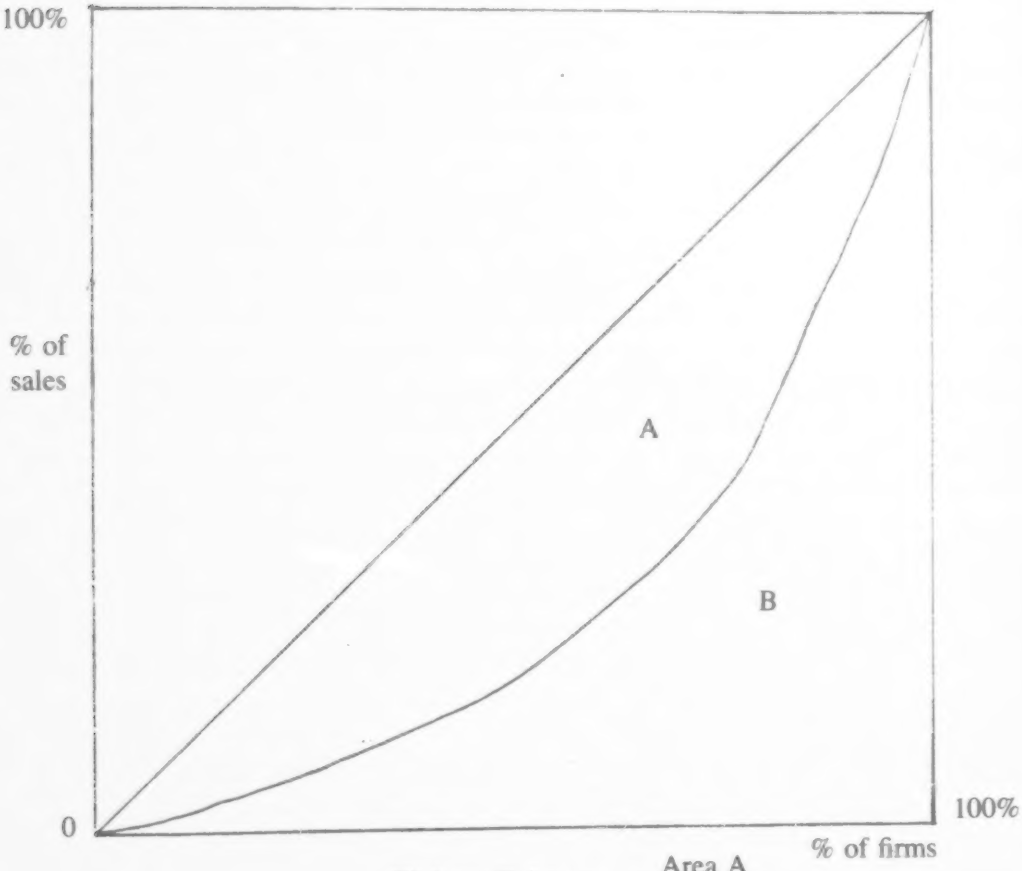
Finally, data on the numbers of firms themselves can tell us about absolute and relative numbers, which is of interest, but cannot tell us about relative economic importance.

In the end, no data set is ever perfect, and compromises have to be made. It is usually data availability that is the controlling factor in the approach used, and data reported in this paper will be no exception. Data on employment and on sales are the most consistently available for the longest time period. For better or for worse, it is these data that have been used directly in this paper. They also serve as the basis for estimates of value added that have been made by another study (Joel Popkin and Company, 1980), which will be summarized here.

C. Relative Importance

This paper will use two standard measures to show *relative* importance. First, simple percentages will be presented (e.g., the percentage of total employment accounted for by firms with fewer than a given number of employees). Second, because simple percentages may hide distributional changes below or above the cut-off point, a broader measure of the size-distribution of firms will be presented: the Gini coefficient. The Gini coefficient measures the difference between the Lorenz curve (indicating the cumulative percentage of activity encompassed by the cumulative percentage of firms, when firms are arrayed from the smallest to the largest) and a line that would indicate complete equality in the size of firms (see Figure 1). Thus, the Gini

Figure 1



$$\text{Gini coefficient} = \frac{\text{Area A}}{\text{Areas A} + \text{B}}$$

coefficient incorporates all information on all sizes of firms, rather than just the information up to an arbitrary cut-off point. The Gini coefficient can range between 0.0 (complete equality, all firms are the same size) and 1.0 (complete inequality, one firm accounts for virtually all activity and all other firms account for virtually nothing). The drawback to the Gini coefficient is that it is insensitive to the absolute numbers of firms; i.e., a universe with only two firms that are of equal size and a universe with a million firms of equal size would each have a Gini coefficient of 0.0. This can be a worrisome problem when the Gini coefficient is used as a surrogate for industry concentration in narrowly defined industries. For the purposes of this paper, in which broad sectors will be analyzed and compared over time, this problem should not be serious.

D. Sectors Analyzed

Statements about and data pertaining to small business frequently cover only the manufacturing sector of the economy. This is understandable. The data here are best; the Bureau of the Census compiles quite detailed reports on a regular basis; and manufacturing tends to be associated with the "heart" of the American economy. But the relative importance of manufacturing has been declining in the U.S. economy. Value added in manufacturing currently constitutes less than 25% of U.S. GNP; even if we take only the portion of GNP originating in the private sector as a base, manufacturing accounts for only 27.6% (see Table 1). Similarly, manufacturing accounts for only a quarter of private sector employment.

Accordingly, in order to assess the status of small business in the economy, it is important to look beyond manufacturing and include the other areas in the private sector as well. This study will do so.

TABLE 1

Percentage of GNP and of Employment Originating in Various Sectors of the U.S. Economy, 1978

	% of GNP	of GNP (Excluding government)	% of employment	% of employment (excluding government)
Agriculture, forestry, fisheries	3.0%	3.5%	3.5%	4.2%
Mining	2.6	3.0	0.9	1.0
Construction	4.7	5.3	4.4	5.2
Manufacturing	24.2	27.6	21.2	25.2
Transportation	3.7	4.2	3.0	3.5
Communications	2.6	3.0	1.3	1.5
Electric, gas, sanitary services	2.5	2.8	0.8	1.0
Wholesale trade	17.2	19.6	5.1	6.1
Retail trade			15.1	18.0
Finance, insurance, real estate	13.8	15.7	4.9	5.8
Services	12.5	14.2	11.7	19.9
Government and gov't enterprises	12.1	—	16.1	—
Rest of world	1.0	1.1	—	—
Self-employed and family workers, non-agricultural	—	—	7.1	8.4

Source: U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract, 1979*, pp. 403, 410-412, 439.

III. The Data on Small Business

A. Numbers of Firms—IRS Data

As a start, it is probably useful to realize that the number of business firms in the United States has been growing, not shrinking, in the three decades since World War II. Table 2, which is based on tax returns filed with the U.S. Internal Revenue Service, presents these numbers. The data appear to be quite comprehensive and are internally consistent over the time period (i.e., we do not have to splice together two or more different data sets). Between 1947 and 1975, the number of firms grew by 16%, or a 3.1% annual rate. Most of these firms are small; in 1975, 65% of the total had business receipts of under $25,000; 85% had receipts under $100,000. Most of the net increase of 5.9 million firms between 1947 and 1975 is attributable to small firms.

Thus, any claims that small firms are disappearing from the U.S. economy or that they can no longer survive are simply not true. The American economic landscape is liberally sprinkled with small businesses, and their numbers continue to grow.

These numbers, however, tell us little about the *relative* economic importance of small business. We now turn to four sets of data which can provide inferences on relative importance.

TABLE 2

Number of Business Firms in the U.S. Economy, 1947-1975

Year	Number of Firms	% annual rate of increase
1947	8,065,000	3.0%
1953	9,372,000	2.8
1958	10,744,000	1.9
1960	11,165,000	0.4
1965	11,417,000	1.0
1970	12,001,000	3.1
1975	13,979,000	

Source: Internal Revenue Service Data, as reported in U.S. Dept. of Commerce, Bureau of the Census, *Statistical Abstract*, various years.

B. Employment by Establishment—County Business Patterns

The first data set is compiled by the Bureau of the Census, in the annual publication *County Business Patterns*. The data consist of employment by *establishment*, based on Social Security records. The data are currently available in usable form for 1962 and 1964-1977. Coverage of workers over this period is reasonably uniform, with only self-employed physicians being added in the mid-1960s. Excluded from the data base are farmers, the self-employed, domestic service workers, and railroad employees.

An establishment is essentially a separate geographic employment location, which may not be synonymous with a separate business firm. Thus, separate stores of a chain-store company or separate plants of a multi-plant manufacturing firm would be individual establishments. (Prior to 1974, however, all of the establishments of the same company within any county were lumped together as a single reporting entity; for 1974 and after, they are listed as separate establishments.[5]) Accordingly, this data set is not an ideal one for our purposes, since we seek measures of the relative importance of small business firms. But to some who are concerned about the problems of size, it may be the size of the workplace (rather than the size of the overall business unit) that matters; (e.g., a worker's satisfaction with his/her job may be more dependent on the size of the establishment than on the size of company [Kwoka, 1980]). The establishment data can provide us with information on this. Also, since the establishment data are frequently cited in discussions concerning small business, it is probably useful to provide an analysis of these data.

Table 3 and appendix Table A1 provide the major set of results for the *County Business Patterns* data. The percentage of total employment that was accounted for by establishments with fewer than 100 employees and by establishments with fewer than 500 employees are the two measures of relative importance; the Gini coefficient provides a third distributional measure, to make sure that there are no important distributional changes above or below the specific size cut-off categories.

These tables appear to indicate that for the overall economy the proportion of employees in establishments with fewer than 100 and 500 employees actually rose between 1962 and 1977; i.e., smaller establishments appear to have become relatively more important. The decline in the Gini coefficient (indicating greater equality in establishment sizes) tells the same story. Some of this change, however, is statistical artifact; the change from county-wide consolidation to individual establishment reporting in 1974 (mentioned above) introduced a spurious increase in the apparent relative importance of small establishments. This fact is seen most clearly in Table A1 in the data for the retailing sector, in which the percentage of employment occurring in establishments with fewer than 100 employees jumped from 69.4% in 1973 to 79.5% in 1974. Virtually all of this change must have come from chain-store operations, such as supermarkets, which reported on a county-wide basis in 1973 and on an individual store basis in 1974. Similar, though less dramatic, changes in reporting apparently occurred in the wholesaling and public utilities sectors and possibly also in the financial sector.

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[5] Also in 1974, the cut-off points of the smaller size categories were changed. This may have caused very small changes in the Gini coefficients.

Even if we net out this reporting change, however, there still seems to have been an economy-wide net increase in the relative importance of small establishments. This increase was modest for the fewer-than-100 category and more substantial for the fewer-than-500 category. Individual sectors varied in their patterns, as can be seen in the tables.

The changes for the overall economy were due to a combination of distributional changes within the individual sectors (which are reported in Tables 3 and A1) and the changing relative employment weights across the sectors. Table 4 provides these latter weights for the beginning and end years. The largest changes in weights involved the decline in the relative importance of manufactur-

TABLE 4

Employment Percentages, County Business Patterns Data, 1962 and 1977

	1962	1977
Agricultural services, forests, fisheries	0.3%	0.4%
Mining	1.5	1.3
Construction	5.6	5.5
Manufacturing	37.7	30.2
Transportation, public utilities	6.9	6.2
Wholesale trade	7.4	7.0
Retail trade	18.5	20.6
Finance, insurance, real estate	6.3	7.0
Services	15.2	21.6
Unclassified	0.7	0.1

ing and the rise in the relative importance of services. Since services establishments tend to be much smaller than manufacturing establishments, this change in relative weights increased the relative importance of small establishments in the economy-wide measurements, even though the relative importance of small establishments was declining within the services sector itself.

This point, concerning the importance of the changes in distributions within sectors and the change in relative weights across sectors, is established in Table 5. The left-hand side of Table 5 provides the actual economy-wide results, reproduced from Table A1. In the center of Table 5, the 1962 distributional weights within each sector—e.g., the 1962 percentage of employment in establishments with fewer than 100 employees for each sector—were held constant and only the relative sector employment percentages for each year were allowed to vary; i.e., the following expression was computed:

$$P_t = \frac{\sum_i P_{i,1962} \cdot e_{i,t}}{\sum_i e_{i,t}},$$

where P_t is the economy-wide percentage of (for example) employment that would have occurred in establishments with fewer than 100 employees in year t, $P_{i,1962}$ is the same percentage for an individual sector i in 1962, and $e_{i,t}$ is the employment in sector i in year t. By contrast, in the right-hand side of Table 5 the 1962 sector employment weights were held constant and only the individual sector's distributional weights were allowed to vary from year to year; i.e., the following expression was computed:

$$P_t^* = \frac{\sum_i P_{i,t} \cdot e_{i,1962}}{\sum_i e_{i,1962}}$$

A comparison of the left-hand side of Table 5 with the center shows that the changes in employment weights above tended to increase the relative importance of small establishments; the right-hand side of Table 5 indicates that the changes within the individual sectors alone meant a decline in the economy-wide relative importance of small establishments, which was only offset by the 1973/74 change in reporting.

In sum, the *County Business Patterns* data do not show an overall pattern of a net disappearance of small *establishments*. Within some sectors there has been a modest decline in the relative importance of small establishments, but this has been more than offset by the shift in the economy toward sectors with smaller establishments.

As we will argue below, however, this pattern probably overstates the relative strength of small *business* when company data is examined.

C. Employment and Sales by Firm—Enterprise Statistics

As part of the periodic economic censuses, the Bureau of the Census has compiled data on a *company* basis for a number of sectors in its publication *Enterprise Statistics*. Data for employment by firm are currently available for the years 1958, 1963, 1967, and 1972; data for sales by firm are currently available for only 1967 and 1972.[6] Since the unit of observation is the company or firm, these data are better suited to the purposes of our investigation.

One aspect of the *Enterprise Statistics* data (and the other data series discussed below) should be mentioned at the outset. Franchising is a popular method of distributing goods and services. In such cases, large companies decline to open branch or subsidiary operations but instead sell or establish franchises; the franchisees are frequently small, independently operated businesses. The franchisers clearly exercise a considerable amount of influence over the franchisees. But, because the latter are considered to be independent companies for census and tax purposes, they are included as independent companies in the data that are described in the following pages. Thus, if one thought that the franchisor-franchisee relationship meant a decrease in the economic importance of the franchisee (as compared to a wholly independent small business), the data reported below overstate the relative importance of small business.

The employment data in the *Enterprise Statistics* have one special quirk: owner-entrepreneurs (and groups of partners) are not counted as employees; thus, the smallest size class of firms is that with "no employees." This quirk yields a problem: should owner-entrepreneurs be excluded and, if so, what should be done about the smallest size class of firm? Or should they be included, and, if so, how? This problem has been handled in two alternative ways. One way is to ignore the smallest size class entirely and to perform all calculations on the remaining categories "with employees." The second way is to count all owner-entrepreneurs (and partners) as employees; this was done in a rough-and-ready way by assuming that each company in every employment size category had a single owner-entrepreneur who had not been counted as an employee and then simply adding the number of companies to the number of employees to achieve a new

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[6] After the analyses for this monograph were completed, the 1977 data were released.

TABLE 3

Establishment Data, from County Business Patterns

Year	All Industries	Agricultural, Forestry Services, Fisheries	Mining	Construction	Manufacturing	Transportation, Public Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, Real Estate	Services	Unclassified
% of Establishments with Fewer than 100 Employees											
1962	51.3%	93.2%	50.4%	78.0%	26.0%	38.1%	77.1%	74.8%	58.0%	63.6%	99.1%
1970	49.5	90.3	46.7	73.0	23.9	35.9	75.8	70.7	54.3	48.7	100.0
1977	54.5	84.2	39.7	74.4	25.5	44.0	79.6	81.1	61.3	57.5	100.0
% of Establishments with Fewer than 500 Employees											
1962	73.6%	100.0%	78.4%	95.0%	56.2%	61.3%	94.7%	87.6%	77.9%	83.2%	100.0%
1970	73.1	99.3	77.3	93.9	55.8	58.3	92.4	86.4	75.9	80.0	100.0
1977	77.5	97.6	74.8	88.6	58.3	72.0	95.8	95.2	80.7	79.1	100.0
Gini Coefficients											
1962	0.777	0.556	0.758	0.667	0.809	0.824	0.651	0.652	0.759	0.716	0.479
1970	0.777	0.577	0.763	0.685	0.799	0.821	0.642	0.672	0.774	0.742	0.486
1977	0.760	0.607	0.786	0.688	0.802	0.790	0.626	0.638	0.741	0.745	0.614

Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, various years.

TABLE 5

Economy-wide Results, Showing the Effects of Changing Employment and Distributional Weights, County Business Patterns

	Actual Results			Results with 1962 Distribution Weights Held Constant			Results with 1962 Employment Weights Held Constant		
Year	100[a]	500[b]	Gini[c]	100[a]	500[b]	Gini[c]	100[a]	500[b]	Gini[c]
1962	51.3%	73.6%	0.777	51.3%	73.6%	0.777	51.3%	73.6%	0.777
1964	51.8	74.3	0.774	51.6	73.8	0.775	51.6	74.1	0.776
1965	51.5	74.1	0.776	51.7	73.9	0.774	51.1	73.8	0.778
1966	50.4	73.1	0.779	51.7	73.9	0.774	50.0	72.8	0.781
1967	49.4	72.4	0.783	51.7	73.9	0.774	49.0	72.2	0.785
1968	49.5	72.6	0.778	52.0	74.1	0.771	48.9	72.2	0.782
1969	49.4	72.5	0.778	52.2	74.2	0.771	48.6	72.0	0.783
1970	49.5	73.1	0.777	52.7	74.5	0.767	48.2	72.3	0.785
1971	50.4	73.9	0.777	53.4	75.0	0.763	48.5	75.0	0.784
1972	50.6	74.4	0.769	53.7	74.2	0.762	48.4	73.0	0.782
1973	50.1	74.5	0.770	53.7	75.2	0.762	48.0	73.1	0.783
1974	52.5	75.7	0.769	53.8	75.3	0.763	50.1	74.2	0.780
1975	53.9	76.6	0.763	54.4	75.7	0.759	51.0	74.8	0.776
1976	54.1	77.2	0.762	54.3	75.7	0.758	51.4	75.4	0.776
1977	54.5	77.5	0.760	54.3	75.7	0.758	51.8	75.7	0.775

[a] % of establishments with fewer than 100 employees.

[b] % of establishments with fewer than 500 employees.

[c] Gini coefficients.

employees-including-owners total. As will be seen, the time trends are the same for both methods.

Again, we have chosen 100 and 500 employees as the size cut-off categories and used the Gini coefficient to measure overall distributional trends.[7] But these measures cover *company* data, so we can make direct inferences about small business.

Table 6 and appendix Table A2 provide the employment data from the *Enterprise Statistics*. Care must be used, however, in comparing the accumulated figures for all sectors over the various years, because a few sectors were included or excluded selectively in the four census years covered. Table 7 provides the list of sector inclusions and exclusions and the relative employment weights of the sectors in each year.

TABLE 7

Employment Weights, Enterprise Statistics

	1958	1963	1967	1972
Mineral Industries	1.8%	1.3%	0.9%	1.0%
Construction	—	—	8.2	9.1
Manufacturing	55.8	55.8	51.0	46.1
Miscellaneous Transportation	—	0.3	0.3	—
Public Warehousing	0.3	—	—	—
Wholesale Trade	6.8	7.0	6.3	7.2
Retail Trade	25.9	20.4	23.2	25.2
Selected Services	9.3	9.7	10.1	11.4

Source: See Table 6.

A more consistent measure of the aggregate time trend is gained by focusing only on the sectors which are included in all four census years. The left hand side of Table 8 provides these aggregate results. For this consistent set of five sectors, there was a modest decline in the relative importance of small business, regardless of the measurement used.

The remainder of Table 8 shows the consequences of the changing weights. The middle three columns show the consequences of fixing the distributional patterns within each sector at their 1958 levels and allowing only the relative employment weights among sectors to change from year to year. These changing employment weights clearly made a large difference in the relative importance of small business. The last three columns show the consequences of keeping relative employment weights among sectors fixed at their 1958 levels and allowing only the distributional weights within each sector to vary. Again, the decrease in the relative importance of small business within each sector was substantial.

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[7] The size classes were different in each of the four years. Because the calculation of the Gini coefficient is sensitive to these differences, the size classes in the later years were consolidated so as to be consistent with the 1958 categories.

Table 9 presents the data on company sales, which are available for 1967 and 1972 from the *Enterprise Statistics*. We have chosen firms with less than $500,000 and less than $5 million in annual sales as the cut-off size categories, with the Gini coefficient offering a measure of the complete distribution. The data appear to indicate a decrease in the relative importance of small firms, regardless of the measure used. There was, however, a substantial increase in prices between these two years: the Consumer Price Index rose by 25.3%, the Wholesale Price Index rose by 19.1%, and the GNP deflator rose by 26.6%. Even if nothing else had changed, we would expect price changes of these magnitudes to cause a decrease in the relative importance of small firms when measured against an unchanged dollar sales standard.[8]

It is possible to obtain a crude estimate of how much of the shifts in Table 9 were due to price increases. Suppose that the overall distribution of firms is log-normally distributed with respect to sales. Following Prais (1976, pp. 191-199), we can use the $500,000 and $5 million sales data to estimate the log variance of the sales distribution for 1967.[9] Next, let us use 20% as a conservative estimate of the price increase between 1967 and 1972 and let us further assume that the price increase affected the sales of all firms equally; i.e., inflation meant a simple scaling up of all values by 20%. We can now calculate the percentage of sales that would be *expected* to occur in firms with less than $500,000 and less than $5 million in sales.[10] This calculation yields 15.6% and 40.5%, respectively, which are above the 15.0% and 38.2% figures actually realized. Thus, the sales data, with the correction for inflation, show a modest decrease in the relative importance of small business.

Overall, then, the *Enterprise Statistics* show a modest drop in the relative importance of small business between 1958 and

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[8] This would be true also for the calculation of the Gini coefficient, unless the size class cut-off points were increased proportionally.

[9] The implied log standard deviation is 3.198. The Prais method uses the two cumulative percentages at the two cut-off points as estimates of the sizes of cumulative tails of the log-normal distribution at these points. These two estimates can then be used to solve for the log mean and log standard deviation which would yield those cumulative tails at those cut-off points. See Prais (1976, pp. 191-199)

[10] Using 3.198 as the log standard deviation and the fact that 49.0% of sales were in firms below $10 million in sales, we get an estimate that 50% of all sales were in firms below $10.7 million in sales in 1967. This last figure is then increased by 20%, and then the variance is used to calculate the percentages at the $500,000 and $5 million cut-off points, according to the expectations of the log-normal distribution.

1972; the data in Table 8, for a consistent set of sectors in the economy, most clearly indicate this result.

D. Sales by Firms—Statistics of Income Data

The Internal Revenue Service annually publishes data for all firms—sole proprietorships, partnerships, and corporations—arrayed by sales size classes in its *Statistics of Income* publications. The data are based on income tax returns and hence should be comprehensive. The data are currently available and usable for 1958-1961 and 1964-1975. Again, $500,000 and $5 million have been chosen as the size cut-off points, and the Gini coefficient has also been provided.[11]

The basic results are presented in Table 10 and appendix Table A3. The relative importance of firms below $500,000 and $5 million declined overall and in each category, while the Gini coefficients rose. Table 11 shows the sales weights at the beginning and the end of these years, and Table 12 shows the effects of the changing sales weights across sectors and the changing distributional weights within sectors.

Again, as was the case for the sales figures in the *Enterprise Statistics*, it is necessary to try to correct these figures for the substantial inflation that occurred between 1958 and 1975. Between these two years, the CPI rose by 86.1%, the WPI rose by 84.9%, and the GNP deflator rose by 92.6%.

There are two ways in which one might try to adjust for these price increases. First, as a rough approximation, let these price increases represent a doubling of the price level. Then, if either $500,000 or $5 million had been considered the approximate cut-off points for a "small business" in 1958, the appropriate points in 1975 would have been $1 million or $10 million. Firms below these latter points in 1975 accounted for only 18.1% and 36.3% of all sales; these percentages are well below the 28.8% and 51.5% for the lower cut-off points in 1958. (See Table 13). Thus, even after this rough correction for inflation, it appears that small business still declined substantially in relative importance.

Second, one could again assume a log-normal distribution for the size of firms, as was done in the previous section. If one uses 85% as the increase in prices between 1958 and 1975, the results of the

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[11] Because the *Statistics of Income* size classes are not the same for each year or even the same across the categories of sole proprietorships, partnerships, and corporations in the same year, it was necessary to standardize the data to twelve size classes. In some cases, estimates of the numbers of firms and of sales in the smallest or largest size classes had to be made. This was done by assuming that firms were log-normally distributed, using the Prais (1976, pp. 191-199) method to estimate the log variance, and then "smearing" the data from adjacent size classes into the empty size classes according to the expectations of the log-normal distribution.

TABLE 6

Company Data, from Enterprise Statistics, Employment[a]

Year	All Industries	Mineral	Construction	Manu-facturing	Trans-portation	Public Warehousing	Whole-sale Trade	Retail Trade	Selected Services
			% of Employment in Companies with Fewer than 100 Employees						
1958	41.3%	44.2%	—	20.6%	—	67.7%	78.6%	65.4%	69.5%
1972	41.3	34.1	69.6	16.2	—	—	76.9	56.9	63.5
			% of Employment in Companies with Fewer than 500 Employees						
1958	55.1%	61.1%	--	37.1%	—	86.1%	94.1%	72.5%	84.0%
1972	53.5	48.6	85.7	28.9	—	—	91.7	64.4	79.3
				Gini Coefficient					
1958	0.726	0.719	—	0.853	—	0.571	0.478	0.503	0.509
1972	0.731	0.789	0.541	0.883	—	—	0.484	0.606	0.566

[a] Data excludes size category "no employees"; for estimates that include this category, see appendix Table A2.

Source: U.S. Department of Commerce, Bureau of the Census, *Enterprise Statistics*, various years.

TABLE 8

The Aggregate Effects of Changing Weights, Employment Data from Enterprise Statistics[a]

	Actual results			Results Holding Constant 1958 Distribution Weights within Sectors			Results Holding Constant 1958 Employment Weights Across Sectors		
	100[b]	500[c]	Gini[d]	100[b]	500[c]	Gini[d]	100[b]	500[c]	Gini[d]
				Excluding the Size Category "No Employees"					
1958	41.2%	55.0%	0.726	41.2%	55.0%	0.726	41.2%	55.0%	0.726
1963	39.8	52.8	.737	41.4	55.2	.726	39.7	52.6	.738
1967	37.2	50.0	.756	41.6	55.4	.724	36.9	49.6	.759
1972	38.4	50.2	.750	44.0	57.6	.703	35.7	47.5	.770
				Including the Size Category "No Employees"[e]					
1958	46.7	59.3	.757	46.7	59.3	.757	46.4	59.3	.757
1963	45.2	57.0	.763	46.8	59.4	.757	45.1	57.0	.763
1967	42.5	54.3	.792	47.0	59.6	.761	42.2	54.0	.788
1972	43.9	54.7	.795	49.6	61.9	.744	41.0	51.9	.806

[a] Combined data for mineral, manufacturing, wholesale, retail, and services sector only.
[b] % of employment in companies with fewer than 100 employees.
[c] % of employment in companies with fewer than 500 employees.
[d] Gini coefficient.
[e] See text for method of inclusion.
Source: See Table 6.

TABLE 9

Company Data, from Enterprise Statistics—Sales

Year	All Industries	Minerals	Construction	Manu-facturing	Trans-portation	Public Warehousing	Whole-sale Trade	Retail Trade	Selected Services
			% of Sales in Companies with Less than $500,000 in Sales						
1967	16.5%	14.1%	34.1%	4.1%	10.2%	—	36.9%	54.0%	46.8%
1972	13.8	6.9	28.4	3.2	—	—	8.2	30.0	47.5
			% of Sales in Companies with Less than $5,000,000 in Sales						
1967	39.8%	38.3%	71.1%	17.4%	53.0%	—	62.8%	75.6%	75.7%
1972	35.9	22.4	64.7	13.8	—	—	48.7	55.1	71.9
				Gini Coefficient for Sales					
1967	0.906	0.886	0.856	0.931	0.737	—	0.802	0.797	0.716
1972	.914	.923	.861	.937	—	—	.752	.832	.825

Source: U.S. Department of Commerce, Bureau of the Census, *Enterprise Statistics*, various years

TABLE 10

Company Data, from IRS, Statistics of Income

Year	All Companies	Agriculture	Mining	Construction	Manufacturing	Transportation	Wholesale and Retail Trade	Finance, Insurance, Real Estate	Services
% of Sales in Companies with Less than $500,000 in Sales									
1958	28.8%	91.1%	18.8%	44.7%	7.2%	12.3%	37.7%	27.8%	73.7%
1968	20.9	80.4	14.6	34.7	4.2	10.2	27.3	18.7	64.0
1975	13.6	60.4	4.9	27.4	2.2	6.5	16.2	10.3	52.6
% of Sales in Companies with Less than $5,000,000 in Sales									
1958	51.5%	97.0%	44.3%	80.7%	26.1%	22.5%	67.9%	43.4%	88.4%
1968	42.4	94.9	36.1	75.3	17.5	20.0	59.0	34.2	85.2
1975	30.7	85.8	14.8	63.5	10.7	14.6	43.8	21.5	75.5
Gini Coefficients									
1958	0.454	0.316	0.464	0.426	0.480	0.480	0.408	0.458	0.383
1978	0.463	0.369	0.472	0.429	0.471	0.479	0.422	0.469	0.403
1975	0.472	0.390	0.485	0.436	0.482	0.485	0.445	0.478	0.417

Source: U.S.Internal Revenue Service, *Statistics of Income*, various years.

TABLE 11

Sales Weights, Statistics of Income Data, 1958 and 1975

	1958[a]	1975[a]
Agriculture	3.5%	2.9%
Mining	1.2	2.0
Construction	5.1	5.1
Manufacturing	35.1	37.0
Transportation and public utilities	6.2	6.6
Wholesaling	14.8	31.2
Retailing	20.1	
Finance, insurance, real estate	7.3	9.7
Services	4.9	4.7

[a] Percentages do not sum to 100.0 because of unclassified categories. Source: See Table 10.

calculation[12] yield expected sales percentages of 23.9% and 45.2% at the $500,000 and $5 million cut-off points in 1975; these are well above the actual levels of 13.6% and 30.7%. (See Table 13). Again, even after this correction for inflation, it appears that small business declined in relative importance.

The sales data from the *Statistics of Income*, then, indicate a substantial decrease in the relative importance of small business, even after we account for the effects of inflation.

E. Gross Product Originating in Small Business—Data Compiled by Joel Popkin and Company

Using a combination of data from *Enterprise Statistics* and *Statistics of Income*, Joel Popkin and Company (1980) has estimated the "gross product originating (GPO)" in small business for the years 1955-1976. Popkin defines small business as firms with 500 or fewer employees. GPO consists of employee compensation, gross profits, net interest, indirect business taxes, and capital consumption allowances; it thus comes close to the standard definition of value added. (GPO excludes rents paid to others, which is usually included in value added).

Popkin's basic method is to use the *Statistics of Income* data for the four available census years to calculate the payroll and average sales size of small businesses. He then applies the average

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[12] The log standard deviation is 3.90.

TABLE 13

Sales Data From Statistics of Income: Actual Results and Correction for Inflation

			Corrections for Inflation			
	Actual Results		Double the size of the 1975 cut-off points		Use Prais Method to Predict Tails of Log-Normal Distribution	
	$500,000	$5 million	$1 million	$10 million	$500,000	$5 million
1958	28.8%	51.5%	—	—	—	—
1975	13.6	30.7	18.1	36.3	23.9	45.2

sales size figures to the *Statistics of Income* data, from which he estimates the remaining four components of GPO for small businesses. He then extrapolates these results to the non-census years in the 1955-1976 period.

Since Popkins's estimates are grounded most solidly in the census years. we have reproduced those years' data in Table 14. As can be seen, there was a modest decline in the aggregate GPO originating in these sectors, with more substantial declines occurring within the mining, manufacturing, and retail sectors. Again, the changing weights across sectors moderated the aggregate decline. Table 15 shows these weights. And Table 16 shows the effects of the changing GPO weights across sectors and the changing distribution weights within sectors.

Thus, the GPO data, which most closely approximate the value added data that would be the ideal measure of relative economic importance, show a modest overall decline in the relative importance of small business.

F. A Comparison of The Data Sets

We have examined in detail four sets of data. Since the first set pertains only to establishments, whereas our major interest is in companies, we shall largely focus on the latter three data sets. All three—the labor and sales data from *Enterprise Statistics*, the sales data from *Statistics of Income*, and the GPO data from Popkin—show a pattern of a decline in the relative importance of small business in the American economy. These economy-wide declines are less severe than the declines within individual sectors (such as mining, manufacturing,

TABLE 15

GPO Weights, Popkin Data, 1958 and 1972

	1958	1972
Mining	3.3%	2.0%
Contract construction	5.6	6.0
Manufacturing	33.3	29.9
Transportation, communications, public utilities	10.9	10.7
Wholesale trade	8.2	8.8
Retail trade	12.0	12.0
Finance, insurance, real estate	16.3	17.3
Services	10.4	13.4

Source: See Table 14

and retailing) because of the shifting composition of the American economy toward those sectors in which small business is more widespread.

The three data sets, though, do show somewhat different overall patterns. The employment data from *Enterprise Statistics* and the GPO data from Popkin show only modest economy-wide declines in the relative importance of small business, whereas the sales data from *Statistics of Income* show a much more substantial decline in the relative position of small business, even after rough corrections for the effects of inflation.

The proximate cause of this disparity in patterns is the differing patterns of the changes in weights among the sectors over the years. Recall that an important part of the economy-wide strength of small business in the employment and GPO data was the shift in weights from manufacturing (large firms) to other sectors (smaller firms). A comparison of the relative sector weights for the sales data in Table 11 with the weights for the employment data in Tables 4 and 7 and the GPO data in Table 15 reveals a striking difference. In the sales data the relative weight of the manufacturing sector *increases* over time and the relative weights of the trade and service sectors *decrease*; in the employment and GPO data the opposite is true.[13]

We next have to ask, how can the rising weight of manufacturing in the sales data be reconciled with its falling weights in the employment and GPO data? The sales and GPO trends can be

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[13] The GPO numbers are supported by the GNP value added numbers. In 1960, value added in manufacturing accounted for 31.8% of GNP; in 1978 the percentage was 27.6%.

TABLE 16

The Aggregate Effects of Changing Weights:
The Percentage of Gross Product Originating in Firms
With 500 or Fewer Employees, Popkin Data

	Actual Results	Results Holding Constant 1958 Distribution Weights Within Sectors	Results Holding Constant 1958 GPO Weights Across Sectors
1958	51%	51%	51%
1963	52	51	52
1967	50	51	49
1972	49	53	46

Source: See Table 14.

reconciled by recognizing that a relatively shrinking proportion of GPO in manufacturing could support a relatively growing proportion of manufacturing sales, through manufacturing firms becoming more vertically specialized and/or the trade and services sectors integrating backward to a greater extent; i.e., manufacturing was becoming *relatively* less vertically integrated.[14]

The sales and employment trends can be reconciled through the relative decline in vertical integration in manufacturing just discussed and also through a relatively rising capital-labor ratio in manufacturing (so that, even for the same degree of vertical integration, a falling proportion of labor could support a rising proportion of sales). A limited amount of data indicates that this latter effect was occurring also. Table 17 presents data on the ratio of assets in 1958 and 1975, derived from the *Statistics of Income*. The usual caveats are necessary in dealing with accounting measures of capital in the inflation-prone 1970s.[15] Nevertheless, it is striking that the capital-sales ratio for manufacturing rose slightly, while that of every other sector except construction declined; recall that this was occurring while the relative vertical integration of manufacturing was falling. Further, the Popkin data show that for manufacturing the ratio of returns to capital as compared to labor compensation was rising between 1958 and 1972 whereas this ratio fell for most other sectors. Table 18 provides these figures.

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[14] For the available data on vertical integration in manufacturing, see Tucker and Wilder (1977). Note that their results indicate only the absolute trends for manufacturing, not the trends *relative* to other sectors.

[15] Most importantly, historical book values of assets understate current opportunity costs.

TABLE 17

Ratio of Assets (Book Value) to
Sales for Corporations, Statistics of Income

	1958	1975
Agriculture, forestry, fishing	1.00	0.75
Mining	1.51	0.98
Construction	0.47	0.52
Manufacturing	0.72	0.73
Transportation, public utilities	2.31	1.82
Wholesale and retail trade	0.35	0.33
Finance	9.65	7.35
Services	0.87	0.69
All sectors	1.46	1.34

Source: U.S. Internal Revenue Service, *Statistics of Income*, 1958 and 1975.

TABLE 18

Ratio of Gross Capital Returns[a] to Labor
Compensation, Popkin Data, 1958 and 1972

	1958	1972
Mining	1.74	1.23
Contract construction	0.39	0.30
Manufacturing	0.31	0.32
Transportation, communications, public utilities	0.59	0.63
Wholesale trade	0.45	0.43
Retail trade	0.54	0.35
Finance, insurance, real estate	3.41	2.60
Services	0.67	0.43
All Sectors	0.63	0.55

[a] Gross profits plus net interest plus capital consumption
Source: See Table 14

Thus, it appears likely that manufacturing has experienced a rise in capital-labor ratios *relative to other sectors* and also a decrease in vertical integration *relative to other sectors* (either greater vertical specialization among manufacturing firms or more backward integration by the trade and services sectors). And a rising weight for manufacturing in the sales data—which would accentuate the apparent decline of small business—can thereby be reconciled with a declining weight in the employment and GPO data.

It follows, then, that if value added were thought to be the best measure of the relative importance of firms, the sales data surely overstate the decline in the relative importance of small firms. The employment data and especially the GPO data seem closer to the mark.

Thus, it is very likely the case that, despite their increase in absolute numbers, small businesses have experienced a modest decrease in relative importance in the past two decades. But because of the changing weights of the various sectors in the economy, the economy-wide decrease is far less than that which would be perceived by looking at only an individual sector (e.g., manufacturing). Judgments about the overall role of small business in the U.S. economy must include the effects of this important underlying trend in the structure of the economy.

IV. Conclusions from This Study

Small business continues to occupy a prominent place in the hearts and minds of many Americans. The tradition of Jeffersonian democracy, of yeomen farmers, independent artisans and craftsmen, and small shopkeepers is one that endures. The existence of a major federal agency (SBA) and separate committees in the Senate and the House of Representatives with specific responsibilities for the care and well being of small business are testaments to our national concern.

The results of this study indicate that small business is still alive and well in the American economy. On an economy-wide basis, the relative importance of small business has declined modestly over the past two decades, but this decline is not nearly as severe as one might believe to be the case from looking at only one or a few individual sectors (e.g., manufacturing). The transition of the economy away from manufacturing and heavy industry and toward services of all kinds is one that has favored small business.

Even the modest overall decline is not too surprising. These decades have been a period in which capital-labor ratios have grown substantially, in which transportation and communications costs have continued to decrease relative to other costs so that more markets have become national or even international in scope, and in which the growth of the overall economy has slowed considerably. In a related study (White, 1982a) this author has shown empirically that small business tends to flourish under conditions exactly opposite to those which have occurred. Thus, one would have expected small business to have done relatively poorly. Indeed, it is probably an indication of the continuing strength and adaptability of entrepreneurship in the American economy that small business did not experience a more serious decline during these decades.

This decline in the relative share of economic activity accruing to small business need not mean that the "giants of industry" have been the beneficiaries. As this author has demonstrated elsewhere (White, 1982b), the largest companies in the U.S. economy have also been experiencing a decline in their share of aggregate economic activity. These pieces of evidence, then, imply that medium size business have been the relative gainers.

The prospect for small business in the coming decades is probably "more of the same." The economy is likely to continue to move toward an emphasis on services, which will favor small business. But capital-labor ratios will surely continue to rise, transportation and especially telecommunications costs will continue to fall in real terms, and slow national economic growth may well persist. As a consequence, the aggregate numbers of small businesses are likely to continue to rise, while their shares of national economic aggregates will continue to show a moderate decline. Proponents of small business may well decry these outcomes. But, under the circumstances—a world in which markets are becoming increasingly national and even international in scope and in which aggregate economic growth is likely to be slow—this outcome is probably the best that can be expected.

TABLE 12

The Aggregate Effects of Changing Weights, Sales Data from Statistics of Income

	Actual Results			Results Holding Constant 1958 Distribution Weights Within Sectors			Results Holding Constant 1958 Sales Weights Across Sectors		
	\$500,000[a]	\$5 million[b]	Gini[c]	\$500,000[a]	\$5 million[b]	Gini[c]	\$500,000[a]	\$5 million[b]	Gini[c]
1958	28.8%	51.5%	0.454	28.8%	51.5%	0.454	28.8%	51.5%	0.454
1959	27.7	49.8	.456	27.6	49.6	.457	26.6	48.0	.458
1960	27.0	50.2	.456	27.7	49.8	.456	26.4	48.9	.458
1961	26.9	50.0	.457	28.1	50.2	.455	26.1	48.6	.459
1964	26.1	49.7	.457	28.1	50.2	.455	25.3	48.5	.459
1965	23.4	d	.459	27.9	50.2	.455	23.0	d	.461
1966	22.4	d	.460	28.1	50.0	.455	22.2	d	.461
1967	22.3	d	.460	27.9	50.0	.455	21.8	d	.462
1968	20.9	42.4	.463	28.2	49.8	.455	20.7	42.2	.464
1969	20.2	41.9	.463	28.5	50.2	.454	19.9	41.6	.465
1970	20.0	41.2	.464	28.5	50.4	.453	19.4	40.6	.466
1971	19.5	40.6	.464	28.4	50.6	.454	18.9	39.7	.466
1972	17.9	38.2	.466	28.3	50.3	.453	17.4	37.7	.469
1973	16.7	36.3	.468	28.0	50.1	.454	16.3	35.9	.470
1974	14.7	32.4	.471	27.3	49.2	.456	14.5	33.0	.471
1975	13.6	30.7	.472	27.0	49.0	.457	14.1	31.6	.472

[a] % of sales in companies with less than \$500,000 in sales.

[b] % of sales in companies with less than \$5 million in sales.

[c] Gini coefficient.

[d] Data are unsuitable for necessary calculation.

Source: See Table 10.

TABLE 14

The Percentage of Gross Product Originating (GPO) in Firms with 500 or Fewer Employees

Year	All Sectors	Mining	Contract Construction	Man-facturing	Communi-cations, Public Utilities	Whole-sale Trade	Retail Trade	Finance, In-surance, Real Estate	Services
1958	51%	52%	88%	28%	19%	89%	75%	49%	86%
1963	52	45	86	26	26	89	73	57	84
1967	50	40	84	23	23	89	70	52	84
1972	49	32	84	21	20	85	65	48	83

Source: Joel Popkin and Co., "Measuring Gross Product Originating in Small Business: Methodology and Annual Estimate, 1955 to 1976," submitted to the U.S. Small Business Administration, September 1980.

Appendix

TABLE A1

Establishment Data from County Business Patterns

Year	All Industries	Agri-cultural, Forestry Services, Fisheries	Mining	Construction	Manu-facturing	Trans-portation, Public Utilities	Whole-sale Trade	Retail Trade	Finance, Insur-ance, Real Estate	Services	Unclassified
% of Employment in Establishments with Fewer than 100 Employees											
1962	51.3%	93.2%	50.4%	78.0%	26.0%	38.1%	77.1%	74.8%	58.0%	63.6%	99.1%
1964	51.8	90.9	55.5	78.7	25.8	38.8	80.5	74.8	58.7	63.2	98.7
1965	51.5	91.3	54.0	77.1	25.4	38.3	80.0	74.2	58.5	63.0	99.4
1966	50.4	92.3	52.1	75.2	24.2	37.9	78.5	73.2	57.9	61.5	99.8
1967	49.4	89.6	50.1	73.5	23.6	37.0	77.4	72.2	57.4	59.8	99.9
1968	49.5	89.8	50.4	74.9	23.6	36.6	77.8	71.9	56.3	59.4	100.0
1969	49.4	90.6	48.5	74.8	23.3	36.7	77.0	71.4	55.9	59.4	100.0
1970	49.5	90.3	46.7	73.0	23.9	35.9	75.8	70.7	54.3	58.7	100.0
1971	50.4	90.5	46.0	73.9	24.8	35.9	75.6	70.5	53.9	58.6	100.0
1972	50.6	90.1	44.9	75.0	24.6	36.1	75.5	70.2	54.1	58.6	100.0
1973	50.1	89.8	44.0	75.8	24.1	36.4	74.7	69.4	54.0	57.9	100.0
1974	52.5	86.0	41.6	71.3	24.4	38.0	78.4	79.5	56.3	57.7	99.0

TABLE A1

Establishment Data from County Business Patterns (Continued)

Year	All Industries	Agri-cultural, Forestry Services, Fisheries	Mining	Construction	Manu-facturing	Trans-portation, Public Utilities	Whole-sale Trade	Retail Trade	Finance, Insur-ance, Real Estate	Services	Unclassified
1975	53.9	86.8	41.1	71.5	25.7	38.9	79.1	80.5	58.2	57.6	100.0
1976	54.1	85.0	40.4	72.6	25.4	42.4	79.7	80.4	60.5	57.5	96.0
1977	54.5	84.2	39.7	74.4	25.5	44.0	79.6	81.1	61.3	57.5	100.0
% of Employment in Establishments with Fewer than 500 Employees											
1962	73.6%	100.0%	78.4%	95.0%	56.2%	61.3%	94.7%	87.6%	77.9%	83.2%	100.0%
1964	74.3	99.3	82.9	96.1	56.5	61.7	96.6	87.9	79.1	82.9	100.0
1965	74.1	99.6	81.2	95.5	56.3	60.6	96.1	87.6	79.2	82.9	100.0
1966	73.1	99.6	80.1	94.4	54.7	60.6	95.6	97.1	78.9	82.0	100.0
1967	72.4	99.3	78.6	94.0	54.0	59.8	95.2	86.8	78.3	81.0	100.0
1968	72.6	99.7	80.4	94.7	54.3	59.5	95.2	86.8	77.6	80.6	100.0
1969	72.5	99.2	78.3	94.8	54.2	58.9	94.7	86.4	77.0	80.6	100.0

TABLE A1

Establishment Data from County Business Patterns (Continued)

Year	All Industries	Agri-cultural, Forestry Services, Fisheries	Mining	Construction	Manu-facturing	Trans-portation, Public Utilities	Whole-sale Trade	Retail Trade	Finance, Insur-ance, Real Estate	Services	Unclassified
1970	73.1	99.3	77.3	93.9	55.8	58.3	92.4	86.4	75.9	80.0	100.0
1971	73.9	100.0	75.3	94.0	57.3	58.3	94.0	86.1	75.8	79.8	100.0
1972	74.4	99.7	75.1	93.8	58.0	58.3	94.0	86.0	76.5	80.0	100.0
1973	74.5	99.5	75.2	94.4	57.6	59.3	94.5	86.1	77.0	80.1	100.0
1974[a]	75.7	96.1	78.0	90.0	57.2	63.9	94.9	93.7	74.7	79.2	100.0
1975	76.6	96.2	76.9	88.4	58.2	64.8	95.2	94.4	76.8	78.8	100.0
1976	77.2	97.7	75.6	87.8	58.3	69.8	95.8	94.6	79.3	79.1	100.0
1977	77.5	97.6	74.8	88.6	58.3	72.0	95.8	95.2	80.7	79.1	100.0
					Gini Coefficients						
1962	0.777	0.556	0.758	0.667	0.809	0.824	0.651	0.652	0.759	0.716	0.479
1964	.774	.574	.741	.668	.808	.820	.631	.655	.756	.718	.480

[a] Change in reporting procedures; see text.

TABLE A1

Establishment Data from County Business Patterns (Continued)

Year	All Industries	Agricultural, Forestry Services, Fisheries	Mining	Construction	Manufacturing	Transportation, Public Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, Real Estate	Services	Unclassified
1965	.776	.574	.745	.676	.807	.822	.634	.659	.757	.721	.475
1966	.779	.580	.750	.681	.809	.820	.640	.665	.759	.729	.484
1967	.783	.591	.757	.690	.809	.822	.644	.670	.761	.738	.490
1968	.778	.583	.748	.675	.806	.820	.637	.666	.764	.738	.492
1969	.778	.575	.758	.676	.804	.820	.640	.668	.766	.738	.495
1970	.777	.577	.763	.685	.799	.821	.642	.672	.774	.742	.499
1971	.733	.575	.767	.679	.796	.821	.644	.672	.777	.742	.486
1972	.769	.575	.766	.669	.791	.818	.642	.672	.775	.741	.496
1973	.770	.572	.771	.663	.792	.817	.644	.676	.775	.742	.497
1974[a]	.769	.599	.785	.698	.798	.812	.638	.646	.759	.744	.565
1975	.763	.589	.777	.699	.800	.809	.628	.638	.750	.745	.520
1976	.762	.593	.779	.690	.800	.795	.626	.641	.743	.746	.657
1977	.760	.607	.786	.688	.802	.790	.626	.638	.741	.745	.614

Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, various years.

TABLE A2

Company Data from Enterprise Statistics

Year	All Industries	Mineral	Construction	Manu- facturing	Trans- portation	Public Warehousing	Whole- sale Trade	Retail Trade	Selected Services
% of Employment in Companies with Fewer than 100 Employees—Excluding Owner									
1958	41.3%	44.2%	—	20.6%	—	67.7%	78.6%	65.4%	69.5%
1963	39.9	51.0	—	19.1	73.6	—	79.4	62.9	67.3
1967	39.9	45.0	68.8	16.3	75.8	—	75.8	60.2	65.4
1972	41.3	34.1	69.6	16.2	—	—	76.9	56.9	63.5
% of Employment in Companies with Fewer than 100 Employees—Including Owner									
1958	46.8%	46.9%	—	21.7%	—	69.8%	80.5%	71.5%	77.2%
1963	45.3	54.1	—	20.2	75.4	—	81.2	68.9	75.3
1967	45.6	47.7	74.6	17.2	77.7	—	77.7	66.0	73.9
1972	47.0	36.6	74.9	17.2	—	—	78.9	62.8	72.3
% of Employment in Companies with Fewer than 500 Employees—Excluding Owner									
1958	55.1%	61.1%	—	37.1%	—	86.1%	94.1%	72.5%	84.0%
1963	52.9	68.1	—	34.5	90.7	—	93.7	69.4	81.7
1967	53.2	61.5	86.5	30.4	92.0	—	92.0	67.8	81.0
1972	53.5	48.6	85.7	28.9	—	—	91.7	64.4	79.3

TABLE A2

Company Data, from Enterprise Statistics (Continued)

Year	All Industries	Mineral	Construction	Manu-facturing	Trans-portation	Public Warehousing	Whole-sale Trade	Retail Trade	Selected Services
% of Employment in Companies with Fewer than 500 Employees—Including Owner									
1958	59.4%	63.0%	—	38.1%	—	87.1%	94.7%	77.4%	88.1%
1963	57.1	70.1	—	35.5	91.4	—	94.3	74.4	86.2
1967	57.6	63.4	89.0	31.3	92.7	—	92.6	72.6	85.7
1972	58.1	50.6	88.2	29.8	—	—	92.4	69.3	84.3
Gini Coefficient for Employment—Excluding Owner									
1958	0.726	0.719	—	0.853	—	0.571	0.478	0.503	0.509
1963	.737	.680	—	.861	.525	—	.468	.532	.525
1967	.738	.724	.542	.883	.494	—	.494	.566	.542
1972	.731	.789	.541	.883	—	—	.484	.606	.566
Gini Coefficient for Employment—Including Owner									
1958	0.756	0.713	—	0.843	—	0.534	0.468	0.581	0.590
1963	.763	.700	—	.858	.500	—	.444	.586	.606
1967	.780	.710	.656	.878	.465	—	.465	.642	.622
1972	.781	.794	.656	.881	—	—	.505	.686	.642

Source: U.S. Department of Commerce, Bureau of the Census, *Enterprise Statistics*, various years.

TABLE A3

Company Data from IRS Statistics of Income

Year	All Companies	Agriculture	Mining	Construction	Manufacturing	Transportation	Wholesale Trade	Retail Trade	Wholesale & Retail Combined	Finance, Insurance, Real Estate	Services
% of Sales in Companies with Less than $500,000 in Sales											
1958	28.8%	91.1%	18.8%	44.7%	7.2%	12.3%	17.7%	52.3%	37.7%	27.8%	73.7%
1959	27.7	90.1	13.8	44.4	6.7	11.8	16.7	49.9	35.6	26.4	71.8
1960	27.0	86.7	18.4	45.7	7.0	11.7	16.9	48.6	35.1	25.4	70.9
1961	26.9	86.5	17.8	44.6	6.9	11.9	17.0	47.8	34.8	24.6	70.9
1964	26.1	84.6	16.8	43.1	6.6	11.7	16.6	45.8	33.4	25.0	70.1
1965	23.4	83.2	15.5	39.9	5.2	11.4	14.1	41.6	30.3	22.0	66.2
1966	22.4	83.2	15.2	37.1	4.8	10.9	13.9	40.5	29.4	21.0	65.1
1967	22.3	82.3	17.5	36.0	4.7	10.6	13.5	39.4	29.0	19.9	64.9
1968	20.9	80.4	14.6	34.7	4.2	10.2	12.6	37.3	27.3	18.7	64.0
1969	20.2	76.9	15.0	32.4	4.0	9.4	12.2	35.7	26.1	18.6	61.6
1970	20.0	74.4	12.8	30.7	3.8	9.5	11.9	35.8	26.0	17.0	59.4
1971	19.5	74.5	12.5	30.9	3.6	9.0	10.7	33.6	24.3	20.2	59.9
1972	17.9	70.9	11.5	30.9	3.3	8.6	10.1	29.9	21.5	15.9	57.6
1973	16.7	69.4	9.1	30.1	2.8	8.4	8.2	28.6	19.3	14.7	55.4

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TABLE A3

Company Data from IRS Statistics of Income (continued)

Year	All Companies	Agriculture	Mining	Construction	Manufacturing	Transportation	Wholesale Trade	Retail Trade	Wholesale & Retail Combined	Finance, Insurance, Real Estate	Services
1974	14.7	70.9	5.0	29.5	2.2	7.5	—	—	17.6	13.0	52.9
1975	13.6	70.4	4.9	27.4	2.2	6.5	—	—	16.2	10.3	52.6
% of Sales in Companies with Less than $5,0[illegible] in Sales											
1958	51.5%	97.0%	44.3%	80.7%	26.1%	22.5%	57.7%	75.4%	67.9%	43.4%	88.4%
1959	49.8	97.1	36.5	78.8	24.0	23.3	51.4	75.4	65.1	44.2	87.6
1960	50.2	97.0	44.2	81.9	25.2	21.7	56.9	74.0	66.7	40.9	87.9
1961	50.0	96.6	43.1	80.6	25.4	21.8	56.9	73.2	66.3	40.2	87.5
1964	49.7	95.6	39.2	81.0	25.3	22.2	57.0	72.9	66.2	40.2	86.4
1965[a]	—	—	—	—	—	—	—	—	—	—	—
1966[a]	—	—	—	—	—	—	—	—	—	—	—
1967[a]	—	—	—	—	—	—	—	—	—	—	—
1968	42.4	94.9	36.1	75.3	17.5	20.0	49.2	65.7	59.0	34.2	85.2
1969	41.9	90.7	33.5	70.9	17.7	18.9	50.2	65.4	59.2	33.3	82.9
1970	41.2	89.9	34.7	69.7	16.5	18.5	48.8	64.7	58.2	31.9	81.2
1971	40.6	90.6	32.2	70.1	15.8	17.7	46.8	62.9	56.4	31.5	81.6

[a] Data as reported by IRS are not suitable for time series comparison.

TABLE A3

Company Data from IRS Statistics of Income (continued)

Year	All Companies	Agriculture	Mining	Construction	Manu-facturing	Trans-portation	Whole-sale Trade	Retail Trade	Whole-sale & Retail Combined	Finance, In-surance, Real Estate	Services
1972	38.2	89.3	28.2	68.7	14.5	17.0	44.1	59.2	52.8	30.3	80.2
1973	36.3	87.1	23.8	69.6	13.0	17.7	40.6	56.7	49.4	28.6	78.5
1974	32.4	88.5	15.6	67.3	10.7	16.2	—	—	45.6	26.0	76.3
1975	30.7	85.8	14.8	63.5	10.7	14.6	—	—	43.8	21.5	75.5
					Gini Coefficients						
1958	0.454	0.316	0.464	0.426	0.465	0.480	0.429	0.380	0.408	0.458	0.383
1959	.456	.334	.456	.423	.466	.480	.431	.386	.412	.459	.386
1960	.456	.333	.460	.422	.466	.480	.435	.387	.413	.461	.385
1961	.457	.336	.463	.426	.466	.480	.438	.390	.416	.462	.390
1964	.457	.346	.467	.427	.464	.479	.435	.390	.414	.461	.391
1965	.459	.356	.469	.425	.465	.477	.439	.396	.417	.469	.398
1966	.460	.358	.472	.429	.464	.478	.438	.396	.417	.466	.400
1967	.460	.362	.466	.430	.466	.477	.439	.399	.417	.467	.400
1968	.463	.369	.472	.429	.471	.479	.432	.406	.422	.469	.403

TABLE A3

Company Data from IRS Statistics of Income (continued)

Year	All Companies	Agriculture	Mining	Construction	Manufacturing	Transportation	Wholesale Trade	Retail Trade	Wholesale & Retail Combined	Finance, Insurance, Real Estate	Services
1969	.463	.378	.475	.434	.470	.481	.432	.409	.424	.469	.406
1970	.464	.382	.476	.434	.473	.481	.432	.410	.425	.471	.411
1971	.464	.380	.479	.432	.474	.481	.440	.416	.430	.464	.411
1972	.466	.390	.478	.432	.475	.482	.441	.425	.436	.473	.414
1973	.468	.393	.482	.430	.478	.482	.440	.426	.439	.475	.417
1974	.471	.394	.487	.432	.482	.483	—	—	.443	.477	.422
1975	.472	.390	.485	.436	.482	.485	—	—	.445	.478	.417

Source: U.S. Internal Revenue Service, *Statistics of Income*, various years.